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ANNUAL REPORT

OF

THE TRUSTEES

OF THE

WORCESTER STATE HOSPITAL

FOR THE

YEAR ENDING NOVEMBER 30, 1929

DEPARTMENT OF MENTAL DISEASES

PUBLICATION OF THIS DOCUMENT APPROVED BY THE COMMISSION ON ADMINISTRATION AND FINANCE
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WORCESTER STATE HOSPITAL.

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MAURICE SCANNELL, *Supervisor, Male Department.*

TRUSTEES' REPORT

To His Excellency the Governor, and the Honorable Council:

The Trustees of the Worcester State Hospital respectfully submit the ninety-seventh annual report of the hospital, together with a record of the various departments, as given by the Superintendent, Dr. William A. Bryan, and a report of the Treasurer, Miss Jessie M. D. Hamilton.

The Board of Trustees desires to express its opinion of the policy of utilizing as much money as is available for the extension of community and research work in the hospital. It is the belief of the board that this is an important change of policy which will undoubtedly bring results. The problem of mental disorder from an economic point of view as well as a humane standpoint is a very important one, and the increasing financial burden on the State should make us alert to try new ways of solving the problem rather than continuing to add to our facilities for the custodial care of patients.

The board again desires to mention the teaching program which has been carried on during the ensuing year in the hospital, and to register its approval of this policy. In as much as mental disease is an important public health problem it would seem obvious that those working with individuals should have a very complete and comprehensive knowledge of at least the fundamentals of mental disorder. The dissemination of information regarding mental phenomena is an important part of any mental hygiene program, and the board believes that the hospital should take the leadership for all mental hygiene activities in the community it serves. It should be responsible for the mental health of this community. Recommendations made in the Superintendent's report for the replacement of roofs, floors and porches is heartily concurred in by the board.

The thanks of the hospital are due to the members of the Visiting Staff, who have given us freely of their time, and to the officers and employees for their loyalty and splendid coöperation during the year.

Respectfully submitted,

EDWARD F. FLETCHER, WILLIAM J. DELAHANTY,
JOSEPHINE ROSE DRESSER, ANNA C. TATMAN,
HOWARD W. COWEE, JOHN G. PERMAN,
WILLIAM J. THAYER, *Trustees.*

SUPERINTENDENT'S REPORT

To the Trustees of the Worcester State Hospital:

I herewith respectfully submit the following report of the hospital for the year ending November 30, 1929, it being the ninety-seventh annual report:

There remained on the hospital books October 1, 1928, 2,594 patients, 1,290 men and 1,304 women. Six hundred and thirteen patients, 352 men and 261 women were admitted during the year. Six hundred and forty-two patients, 380 men and 262 women were discharged from the hospital. Of this number 383 patients, 241 men and 142 women were discharged, 235 patients, 124 men and 111 women died, and 24 patients, 15 men and 9 women were transferred, leaving at the end of the statistical year 2,565 patients, 1,262 men and 1,303 women.

STAFF CHANGES.

Promotions.

Francis H. Sleeper, from Clinical Director to Assistant Superintendent January 14, 1929.

S. Spafford Ackerly, from Senior Physician to Clinical Director January 14, 1929.

Arthur T. Whitney, from Assistant Physician to Senior Physician April 22, 1929.
Morris Yorshis, from Assistant Physician to Senior Physician October 14, 1929.

Appointments.

Samuel W. Hartwell appointed Senior Physician August 1, 1929.
Ruth Thompson appointed Assistant Physician August 20, 1929.

Internes.

Kendall B. Crossfield appointed Clinical Assistant July 15, 1929.
Arthur W. Burckel appointed Clinical Assistant August 1, 1929.

Resignations.

Jacob Goldwyn resigned to go into private practice September 30, 1929.
Lyman Orten resigned March 22, 1929.
Cesareo DeAsis resigned to go into private practice November 19, 1929.
William F. Finnegan resigned February 21, 1929.
Bardwell H. Flower resigned March 7, 1929.

Report of the Psychiatric Service.

S. Spafford Ackerly, M.D., Clinical Director

There are four important phases of the work of the past year which deserve mention. First, more intensive therapy for the individual patient, second, teaching activities, third, extramural work and fourth, publication. Hand in hand with the physical therapy of patients must go intelligent psychological treatment. We have found that the old slogan, "Too many patients, too few doctors" does not hold, when the psychiatrists are vitally interested in their patient's problems. It is difficult for the ward physician to become enthusiastic over an individual patient if those above him do not evince this same interest, and show the way.

Such interest has grown steadily during this past year. At times ward physicians have vied with each other to treat certain few patients who were the type to benefit by intensive psychotherapy. It is the rule of each physician to be carrying a group of patients on an intensive treatment basis, each patient receiving from ten to fifty hours of treatment. Such cases are presented at a special staff meeting held once a week.

As part of the individual-treatment-plan the patient is now brought at once into the physician's office and is no longer subjected to the confusion of the old admitting office where attendants and others are coming and going. On the admission service each patient has a chart similar to that of a general hospital and his entire treatment recorded. Formerly this was only done on the medical service. As soon as the patient is up and around, an effort is made to introduce him to a patient who will be friendly and congenial. This is difficult to carry out fully but a step in that direction has been made. More efficient hydrotherapy is now being performed on the male service and the patients under treatment are kept on the same ward. The ward physicians have instituted office hours so that any parole patient may see a physician if he so desires.

One of the most important phases of the work during this last year has been that of teaching. Teaching is the corner stone of progress. Students in the field of medicine, nursing, social service, occupational therapy, theology, and general education, are coming to this hospital all through the year for instruction in abnormal psychology and mental hygiene. There is no better place to teach these subjects than in a large state hospital. The superintendent has another motive for stressing the teaching program, namely, to recruit desirable personnel into the ranks of state hospital service. Regardless of the latter, however, students have been benefited not only personally but also in their understanding of what state hospitals are doing for the mental health of its patients and to the community.

Students from two medical schools in Boston have been receiving instruction in psychiatry during the last two summers. This course will be extended this fall to include instructions of senior medical students from Tufts' Medical School. Groups of four students will begin a two months course at this hospital October first. New groups will come every two months during the year. These students are planning their medical career this year. It is hoped that their interest may be sufficiently aroused by their experience here to influence the right sort of men to take up psychiatry. In any event the course is designed to help them in whatever field of medicine they choose to follow.

The following groups have served on a student basis in the hospital for varying periods during the year:

1. Student nurses from general hospitals. The following hospitals are affiliating with us for a three months course:

   Grace Hospital, New Haven, Connecticut.
   Holyoke Hospital, Holyoke, Mass.
   Hahnemann Hospital, Worcester, Mass.
   Memorial Hospital, Worcester, Mass.
   Leominster Hospital, Leominster, Mass.
   Rutland State Sanatorium, Rutland, Mass.
   Framingham Union Hospital, Framingham, Mass.
   Somerville Hospital, Somerville, Mass.
   Hart Hospital, Roxbury, Mass.
   Worcester City Hospital, Worcester, Mass.

2. Senior Medical Students from Tufts College—two months.
3. Occupational Therapists—Boston School of Occupational Therapy—six months.
4. Psychiatric Social Workers, social worker students—Smith College—nine months.
5. Theological students representing the following seminaries:

   Union Theological Seminary, New York.
   Yale Divinity School, New Haven, Conn.
   Boston University School of Theology, Boston, Mass.
   Chicago Theological Seminary, Chicago, Ill.
   Garratt Biblical Institute, Chicago, Ill.

Extra-mural activities are becoming more important each year. The policy of encouraging the staff physician to make contacts with other hospitals, thus keeping in touch with what is being done elsewhere is a far-sighted one and reacts favorably upon his own hospital. To teach properly the teacher must keep in touch with the sources of new ideas. Members of the psychiatric staff have been in attendance during the past year in both out-patient and in-patient services of several Boston and Worcester Hospitals.

The staff of the hospital has been of increasing service to the community. Courses in Mental Hygiene, both elementary and advanced, were given to teachers in Worcester and in Webster. A course in the psychology of Adolescence was given to the College Club in Worcester. Besides these courses about eighty lectures on various phases of Mental Hygiene were given before the Parents-Teachers Associations, Boston University, Teachers Organizations, Church Organizations and Societies. The Superintendent gave a series of radio talks over WTAG.

Turning to more definite contributions the following articles were published or have been accepted for publication during the past year.

1. Hypnoidalization — Its Psychotherapeutic Value — Journal of Abnormal and Social Psychology (Dr. Jacob Goldwyn).
2. Pyromania and Kleptomania (Dr. Jacob Goldwyn).
3. The Effect of Hypnosis in Basal Metabolism (Dr. Jacob Goldwyn).
4. Alcoholic Psychosis or Schizophrenia, a case report submitted for publication (Dr. Morris Yorshis).

5. Differential Diagnosis between Paranoia, Paranoid Condition and Dementia Praecox, Paranoid Type, submitted for publication by Dr. Morris Yorshis.

The following work is under way.

1. Hysterical Paralysis, Treatment by Hypnosis.
2. The Psychiatric.
3. Psychosis Associated with Pregnancy.
4. Cardiovascular Condition in Dementia Praecox.
5. Follow up studies on Catatonic Dementia Praecox, cases out of the hospital five years.

Report of the Psychological Department

David Shakow, Head Psychologist.

The Psychological Department was reorganized in September, 1928, when the present director took charge. The few months before the end of the previous fiscal year were rather lean ones. Only the essential routine, training, etc. were taken care of.

A review of the work of the last year reveals activities along numerous lines. We might be accused of attempting to emulate or even improve upon the example of the Leacock hero who sprang to the saddle and rode off hastily in both directions. However, further consideration of the validity of the criticism that we are attempting many things at once lead one to place less importance on it. It is true that we have little in the way of concrete results to show, but it is obvious that one cannot achieve results as quickly in a number of subjects as one can in concentrating on one. It is hoped, to return to the direction analogy used earlier, that the next report will show arrival at least at a few destinations and considerable progress along others.

Of course, these remarks refer to the long-period work, largely of research nature. Our routine work has gone its way smoothly and well. The workers of the department have coöperated excellently and evidenced considerable interest in both the routine and research programs. They have worked well with little supervision, which has left the director with some freedom to spend on special developmental and research work.

The laboratory was moved from its inadequate quarters on Appleton 4 to much more satisfactory quarters on Sargent 3, in January, 1929. Its present quarters consist of an office, two examining rooms and a shop-experimental room, the latter painted black for visual experiments.

The department is distinguished from other hospital departments in that its work is not confined to the house but that a large portion of it is out-patient work. The workers in the department have to deal with a *clientele* which shows a very considerable degree of heterogeneity— probably as diverse a subject population as can be found in any single organization. A listing of the source of cases will give an idea of this great variety:

House:—

Regular patients (all kinds of psychoses).
Research cases: Hospital dementia praecox research.
Own researches: General paretics; alcoholics; various others (infants, pregnant women, etc.).
Employees.

Out-Patient:—

Scholl Clinics, Child Guidance Clinic, Girls' Welfare Society, jail, miscellaneous (referred by other clinics, other individuals, etc.).

Other:—

Normal subjects for standardization purposes.

Thus we have a *clientele* which ranges in age from one month to over 70 years, which covers practically the range of distribution of intelligence and "normality," which shows a tremendous variability in the

presence and degree of physical defect, which runs the gamut of language difficulty. For such a group it is obviously necessary to have an examining schedule exceedingly varied and of sufficiently wide range to elicit interest and coöperation. This we have attempted to assemble.

Our examining equipment includes a large number of tests in each of these groups: Individual language, for general mental ability; group language, for general mental ability; group non-language, for general mental ability; performance, of a multiplicity of kinds; special (memory, association, apperception, etc.); personality and character; vocational; miscellaneous (achievement, etc.).

Test batteries have been arranged for all kinds of groups. In the Child Guidance Clinic it has been found advisable to construct schedules which would take into account not only the age of the subject, but the thoroughness with which it was necessary to work up the case. The subjects have been divided into four groups: Pre-school, 6-12 years, 12-16, and 16-over. For each of these groups three schedules have been prepared. A, B, and C. The A schedule is the minimum one and takes approximately an hour and a half to administer. The B schedule is the medium one and takes between three and four hours to administer. The C schedule is the maximum one and takes six hours or more to administer. (Of course the longer schedules are broken up into a number of examination sessions). Each of these schedules is eclectic and contains at least a general test and a performance series.

In the House, a similar principle is followed though it has not been worked out so definitely. The schedules are arranged by type of patient and by reason of being referred rather than by age. Thus the regular patients in the regular routine have the equivalent of the minimum schedule, whereas the dementia praecox patients on research have the equivalent of the B schedule.

The routine work of the Psychological Department consists largely of the administration of mental tests to patients and out-patients. A short statistical report of the routine accomplishments of the year might best be presented here.

In all, 1,169 individuals were examined, falling into the following groups: House patients, 361; out-patients, 537; employees, 198; others, 93; total, 1,169.

These individuals were given 2,645 tests, viz: Stanford-Binet (or Kuhlmann-Binet), 742; group (given individually except in a few instances), 370; performance series, 904; memory, 213; association, 221; personality, 140; vocational, 53; achievement, 2; total, 2,645.

The House patients examined consisted of a few distinct groups: First, there were the 154 regular patients referred by the medical staff. This group was composed mostly of cases where there was a question of mental deficiency. Some were court cases. There were 83 Special Study Dementia Praecox patients examined. Fifty of these had second examinations, and 13 had third examinations—146 examinations altogether.

Eighteen general paretics were examined for special study. Besides these, there were 86 other patients examined for one reason or another.

In the Out-Patient Department 303 examinations were made in the School Clinics held in various towns. 172 cases were examined in the Child Guidance Clinic. (For analysis of cases see the report of the Director of Child Guidance Clinic). Thirty-three girls were examined at the Girls' Welfare Society, fourteen prisoners at the jail, and there were fifteen miscellaneous subjects.

One hundred and ninety-eight attendants and nurses were examined. Of the 93 others the largest part consists of other employees.

One of the essential functions of a psychological department is to carry on research work. A department which is organized on a purely routine basis is bound to stagnate and have a hebetating influence upon its members, eventually affecting that routine work unfavorably. The need

for research in psychopathology and related fields is great, the opportunities unlimited. The immensity of this field of research for psychologists might perhaps bear referring to in more detail. Almost every specialty in psychology has some field of work in an organization such as ours. The child psychologist, the abnormal psychologist, the animal psychologist, the experimental psychologist, the applied psychologist, have a scope which is only limited by their interest and abilities.

Research activities, in so far as the patient is involved, fall roughly into three groups; therapeutic, diagnostic and theoretical. Of course, there is considerable overlapping, but the primary purpose of the research is under discussion.

In the therapeutic field there is considerable scope for work both in the determination of the various factors which may have a place in therapy (e. g. in relation to occupational therapy; various forms of psychotherapy, such as hypnosis) and in working out measures of the degree of effect of administered therapy.

In the diagnostic field lies a tremendous opportunity for the psychologist. The uncertainty of clinical diagnosis could in many instances be decreased if laboratory tests were available which could be used for differential diagnosis in a similar way to which the tests of general intelligence are used in the diagnosis of feeble mindedness. Tests for retardation, affective rigidity, perseveration (to take a few clinical symptoms), could be developed if sufficient time and effort were given to it. The laboratory would then be of considerable aid in making more exact the definitions of various symptoms and supplying objective measures of them.

In the field of theoretical research, the need is obvious. Psychopathology is in a state where more controlled work of both a qualitative and a quantitative nature is essential. The opportunities lie both in the test and in the experimental field. An attempt to list these at all fully would necessitate an analysis of almost the entire subject of psychopathology. A mention of a few of the major fields of endeavor, however, will suggest the range of possibilities:—

1. Study of abnormal states in normals — Hypnosis, dreams, sleep, hallucinations, etc., suggestion, illusions, hallucinations, etc.
2. Study of abnormals — both normal and abnormal states, — objective observation, studies of memory, association, emotions, sensations, etc.
3. Abnormal states in animals. Animals offer an unusual field of experimentation for psychopathology because of the possibility of controlling genetic factors and environmental stresses. This field has scarcely been touched. Although the application to the human field would have to be very cautious, it seems very probable the findings in this field will give us valuable time.

Our department takes its part in the teaching program of the hospital. Every group of affiliate nurses is given a twelve hour course in psychology. The medical internes are given an eight hour course in psychometrics and psychology. Occasional lectures are also given to the Occupational Therapy and Social Service Departments. During the summer of 1929, a group of school teachers studying here were given an introductory course in the principles of psychometrics. A number of papers were presented to the staff in seminar and staff meeting. The subjects were, "Psychometric technique in the Hospital," "The Ninth International Congress of Psychology" (a report of the Congress, attended by the director), and "Gestalt Psychology." A few lectures to community groups were also delivered.

Because of the wide range of material at the command of the department this hospital is an exceptionally fine place for training workers in psychometrics and clinical psychology. This fact recognized, it is desirable that all who come here shall have the opportunity of working with this material. It is, therefore, the policy of the department to make the

service a rotating one, in order to cover all the various types of subjects at our command. The routine includes attendance at some of the ward walks and staff-meetings.

Although the members of the department are employees rather than students, it is to be recognized that as a rule they have had little practical experience and that their readiness to come here on meager salary or no salary at all implies a desire on their part for training. This places the responsibility on us of regarding them as students, which we have tried to do.

We have been called upon a number of times to provide training for outside workers. The hospital has been very cordial in its attitude towards this work. Miss Jeannette McClure of the Hartley-Salmon Clinic of Hartford spent four days with us, and Miss Louise Butler of the Lyman School spent two weeks in becoming acquainted with various aspects of our technique.

During the past year one paper was published in association with Dr. Grace H. Kent of the Danvers State Hospital. This was, "Group Tests for Clinical Studies," *The Pedagogical Seminary and Journal of Genetic Psychology*, 1928, 35, 595-618. Another paper on "Ebbinghaus" was accepted by the *American Journal of Psychology* for April 1930 publication. Occasional abstracting was done for Psychological Abstracts.

The year has been a profitable one in a good many respects. But there are still a host of opportunities of which the department is not taking advantage. Despite the fact that considerable progress has been made in organizing the work so that it is done rather efficiently, we cannot take care of all the routine and as much research as our program had intended. Our research plans, broad in scope but integrated in aim, have had to be curtailed along various lines because of lack of personnel and room. Affiliation with the Psychological Department of some University by which some of their students could come here for research and training would help the situation considerably. Very little of a laboratory research is being done by us with the dementia praecox study group, in which there is a great deal to do.

Report of the Social Service Department

Eleanor Peck Entorf, Head Social Worker

It may be of interest to know that the Social Service Department has this year made a total of twenty-nine hundred and thirty-three calls. It will in some way give an idea of the volume of work carried by it. Total number of cases referred to the department during the year numbers nine hundred and forty-two. Of this number six hundred and thirty-nine were new cases which had not been handled by the department before. Two hundred and forty-six histories were secured. This is a decided advance over other years and indicates that the staff are more and more frequently demanding social service investigations and are seeing the value of as full information on cases as is possible to obtain. The average number of patients on visit each month was two hundred and twenty-one. This means, of course, in addition to the new work of the department, social service has been called upon to carry this number of cases as a continuous load.

The Child Guidance Clinic has gradually become an entity in itself and this past year none of the regular social workers from the hospital have carried any work at the clinic. The clinic now has a full time social worker, who assumes entire responsibility for her department, and the only contact which the hospital maintains in a social service way is to coöperate with the clinic on the matter of the students.

This past year we have had a special worker in our department who has been coöperating with the activities of the Y. W. C. A. It has been her particular duty to carry into their organization a mental hygiene program. In addition to her work in that organization this worker has

been giving five different courses in the community in the field of mental hygiene. She has also given various lectures at the request of different community organizations. Other workers in the department have given lectures at the request of similar institutions in various places.

In regard to the activities within the hospital the department has been working as in previous years. The Smith College School for Social Work has continued to coöperate with us in the matter of students and we have had four this year. These students come to us for a period of nine months and we together with the Child Guidance Clinic work out the period of training for them. This past year we had three special students during the summer, whose aim it was to discover if they were interested in continuing in the field of hospital social work. Another student phase has been the advent of medical internes from Boston for a period of two months. The Social Service Department has arranged to coöperate with the medical staff in giving these students an idea of social service. Four hours of lecture work has been prescribed for them, and in addition the internes are expected to take at least one complete social service history during their stay with us. The lectures to the nurses, of course, continue as before.

During the year the department has also entertained various visitors from outside the state and also from outside the country. There have been six visitors from England who have been particularly interested in the activities of a mental hospital. It has been our pleasure to discuss with them our various methods in the hospital, that this would help them in their organization work at home. We have also had other visitors who have been particularly interested in the working out of Child Guidance Clinic in connection with State Hospitals especially as regards the Social Service Department.

It is the feeling of the head worker that a much broader future awaits the department because of several things, the most immediate one being the coöperation with the Child Guidance Clinic and the rather unusual opportunity for training students both at the hospital and at the clinic. This offers an almost ideal opportunity for the psychiatric social service student, in as much as the clinic itself is just unfolding and is just beginning to see its potentialities. There can be no doubt that future developments will prove most interesting. There should at all times be the closest coöperation by the two departments.

The work with the medical internes has only just begun but the head worker feels that as the medical staff grows in their appreciation of the value of social service they will see the important contribution that this is in the training of internes. It seems to the head worker that, whether or not internes go into psychiatry they must be as fully acquainted with the problems of the individual as is possible, and that much of this can only come through a full acquaintance with the social situation of patients. It is hoped that eventually the work with various agencies in the city can be developed more fully. This beginning has just been made with one organization and opportunity for doing it with other organizations should present itself in the not too far distant future. It would seem that the department should carry at least one worker who can make this contribution because of training and personality. We have, of course, been greatly pleased by an exceptionally well fitted person for this work this year.

The dangers in the department lie in the fact that too much emphasis may be placed upon the routine work and this may be allowed to swamp the larger perspective. This is, of course, a very natural and easy fault to fall into inasmuch as the staff is very likely to demand more and more careful investigations both in regard to visit patients and to histories. It must be remembered, however, that the aim of any Social Service Department and certainly its real strength, lies in the real case work that is done. The choice of a few well selected cases on which the various

workers can expend their time and skill in an effort to reconstruction and readjustment is of vital importance. The pressure of work should under no circumstances be allowed to supersede this.

Report of Nursing Service

Anne F. McElholm, R.N., Principal of School of Nursing

In the year 1929 progress has been made by the training school. The school has increased to an enrollment of forty students and an affiliation of twenty students.

Framingham-Union Hospital of Framingham and Leominster Hospital of Leominster have signed contracts to send two students each every three months. Leominster Hospital is so pleased with the affiliation that they have asked us to take another student.

Ten students are at the Boston City Hospital affiliating for one year. Two male students are at the Worcester City Hospital for a nine months affiliation.

Nineteen female students were enrolled for training in the class starting in 1929.

Four nurses completed their course of training and received their diplomas in June.

Two new, bright, sunny class-rooms, with equipment were opened and two graduate registered nurses were installed as instructors.

A social director now supervises the play-time of the student nurses and it is felt that she has done a great deal to help the students adjust themselves to a new environment.

The Alumni Association gave $75 to the school to start a canteen, the profits of which are to be used for the betterment of the training school and the nurses home. The canteen is operated in the "Rendez Vous" of the nurses home and is a very popular place.

Report of the Medical and Surgical Service

Clifton T. Perkins, M.D., Senior Physician

The following is a summary of the various activities of the Medical and Surgical Services during the year from December 1, 1928 to December 1, 1929.

Population

	Female.	Male.	Total.
Patients remaining Dec. 1, 1928	119	128	247
Admitted	419	578	997
Discharged	330	458	788
Deaths (Main Hospital)	86	79	165
Deaths (Summer Street Dept.)	36	22	58
Escapes	0	12	12
Patients remaining Dec. 1, 1929	122	157	279

A total of 1,244 patients were cared for on the service, representing 61 more than the previous year. An analysis of these cases shows that they included all of the common medical conditions as well as many varied major and minor surgical problems. A comparative few were on the medical service only for classification and special study relative to some particular system of organs.

There were 165 deaths in the active medical and surgical wards, with an additional 58 deaths at the Summer Street Department, giving a total of 223 or 70 less than last year. An analysis of these deaths reveals the following general information as to causes:—

(a) 109 deaths, or 49% of all deaths, were due to those conditions incident to advancing years—heart, kidney, and vascular diseases. These do not include pneumonia.

(b) 26 deaths, or 11.5%, were due to tuberculosis, particularly involving the lungs.

(c) 20 deaths, or 9%, were due to general paresis of the insane, and over half of these deaths occurred in conjunction with malarial therapy during July, August, and September. This leads us to believe that where possible, malarial therapy would be better postponed during the hot, exhaustive months except where patients are otherwise in very good physical condition.

(d) 12 deaths, or 5%, were due to some brain disease other than arteriosclerosis and syphilis.

(e) 12 deaths, or 5%, were due to carcinoma.

(f) 8 deaths, or 3.6%, were due to lobar pneumonia, and of these, all but one were beyond middle life.

(g) The remaining 36 deaths, or 16%, were of varied isolated causes, representing no classification of any particular interest.

As may be noted in the Laboratory Report there were 84 autopsies, representing 28% of the deaths. This is 3% less than last year.

In general the service has been active, the population has been continually changing, and at times there is a waiting list for admission to either the medical or surgical wards.

Reports of Clinics

Wassermann	857
Spinal punctures	239
Eye, ear, nose and throat each	639
Specific treatments	1,834
Typhoid vaccines	630
Cold vaccines	16
Gynecological examinations	360
Small pox vaccinations	1,073
Total	5,648

Out-Patient

Dressings

Thayer 2	15,288
Folsom 2	7,243
Total	22,531

The various clinics maintained an average volume of work. At the present time there are 123 luetic patients in the hospital, all of whom are carefully checked and proper treatments administered as indicated.

The out-patient care and dressings represent a decrease in volume as compared with last year.

On January 14, 15, and 16, 1929, a careful survey was made of all patients then in the hospital, and all of those approximately 50 years of age or under, were vaccinated against smallpox. Details of this clinic have been previously reported.

A summary of the combined male and female cases follows:—Total number of cases vaccinated, 1,001; previously vaccinated, 653, or 65.23%; not previously vaccinated, 348 or 34.77%; show "take", 360, or 36%; do not show "take", 641, or 64%; of the 655 previously vaccinated, 223 or 34%, showed positive revaccination.

Surgical Report

Colecystectomy, 1; curettage of right humerus for osteomyelitis, 1; excision of carbuncle on neck, 1; tonsillectomies, 58; excision of rectal fistula and hemorrhoidectomy, 1; removal of finger nail, 1; plaster cast applied to arm, 1; salpingectomy, 1; dilatation and curettage, 1; cauterization of endo-cervix, 1; excision of Bartholin's cyst, 1; perineorrhaphy and hemorrhoidectomy, 1; perineorrhaphy, 1; double inguinal herneorrhaphy, 1; appendectomy and laparatomy, 1; cystotomy, 2; repair of perforated gastric ulcer, 1; appendectomy, 2; bilateral salpingectomy, 2; am-

putation of finger, 2; opening and irrigation of antrum of Highmore and partial resection of left turbinate, 1; application of splint to right nostril for fracture, 1; excision of carbuncle, 4; suturing laceration of hand, 2; excision of paronychia, 3; trachelorrhaphy, 1; repair of umbilical hernia-Mayo Op., 1; trachelorrhaphy, perineorrhaphy and dilatation and curettage, 1; excision of chalazion, 1; incision of blebs on ankle, 1; application of plaster cast to shoulder and chest, 1; trachelorrhaphy, perineorrhaphy, uterine suspension and appendectomy, 1; incision and drainage of cellulitis of hand, 1; incision of abscess, 11; plaster cast applied to wrist for fracture, 2; lysis of adhesions for sub-acute pancreatitis, chronic hepatitis with extensive abdominal adhesions, 1; trachelorrhaphy and perineorrhaphy, 3; biopsy of neck, 1; application of plaster cast to hip, 1; application of plaster cast to ankle, 1; excision of rectal abscess, 1; ice tongs applied to knee for traction, 1; perforated gastric ulcer, 1; gastrotomy, 1; trachelorrhaphy, perineorrhaphy, Baldi suspension and appendectomy, 1; pan-hysterectomy, 1; radical amputation of left breast, 1; jejunostomy, 1; supra-cervical hysterectomy, salpingectomy, appendectomy and hemorrhoidectomy, 2; direct inguinal herniorrhaphy, 1; salpingectomy, suspension (Gilde), appendectomy, trachelorrhaphy and dilatation and curettage, 1; hemorrhoidectomy, 4; herniorrhaphy, 4; ileo-cystectomy, 1; excision of fibroma of right breast, 1; posterior gastro-enterostomy, 1; amputation of right foot, 1; cauterization of cervix and perineorrhaphy, 1; excision of cervical polyp and perineorrhaphy, 1; subtotal hysterectomy, 1; lysis of adhesions and colostomy, 1; circumcision, 1; cuturing lacerations of knee, 1; intravenous injections, concentrated salt, solution for varicose veins, 5; trachelorrhaphy, perineorrhaphy, cauterization of cervix and dilatation and curettage, 1; laparotomy, 1; repair of prolapsed rectum, 1; excision of ganglion of left wrist, 1; removal of sebaceous cyst from scalp, 1; Total, 160.

Although this report represents approximately 100 less operations than last year, it does not represent any neglect of necessary surgical care, and is consistent with average activity when considered in conjunction with the other various activities of the service.

Many tedious and somewhat dangerous surgical procedures of the past have been replaced by less dangerous and what we believe to be equally efficient measures.

Obstetrical Report

Number of maternity cases delivered between December 1, 1928 and December 1, 1929 inclusive: Number of live births, 19; number of still births, 0; number of deaths of mothers, 1; number of deaths of babies, 0; number of cases of inflamed eyes, 0.

Although representing nearly 50% increase over last year, this report shows a marked drop over the years previous to 1928. The report this year is marred by the death of a young mother, 33 years old, occurring a few hours after delivery. This was the first child. The mother went into labor, rapidly going into an eclamptic state and required immediate delivery of her premature baby. Throughout her entire prenatal care the mother was very resistive and difficult to manage.

Dental Report

Patients, 3,418; examinations, 2,428; cleanings, 1,099; fillings, 1,066; extractions, 1,336; treatments, 1,306; gas-ether cases, 27; gas-oxygen cases, 6; impactions removed, 29; plates made, 37; repairs, 30; X-ray diagnosis, 185; removal of cyst, 1; crowns, 10; inlays, 11; alveolectomy, 5; bridge, 4; apiectomy, 1; smears and microscopic examinations for Vincent's Angina, 49 (37 positive); Total 11,048.

Laboratory Report

Agglutinins, 102; Alveolar CO2, 350; autopsies, 84; bacterial cultures, 31; blood cultures, 9; bacterial smears, 179; basal metabolism, 457;

bleeding time, 5; blood creatinine, 343; blood N. P. N., 441; blood sugar, 842, blood urea, 326; blood uric acid, 362; blood counts, red, 2288; blood counts, white, 2,567; blood counts, diff., 2,390 hemoglobin, 2,285; clotting time, 139; galatose tolerance, 594; icteric, 26; liver function test, 102; Mosenthal test, 59; mastic test, 12; microscopic sections, 281; nitrogen partition, 628; parasites, 5; Platelet count, 2; plasmodia malaria, 159; renal function, 485; spinal fluid, cell count, 277; spinal fluid, gold 273; spinal fluid, glob, 279; spinal fluids, sugar 2; sputum, 79; stool, 71; stomach contents, 2; sedimentations, 3; total chlorides, 1; total nitrogen, 1; bloodtyping, 10; urinalysis, 4,715; quantitative sugar, 16; Van den Bergh, 125; vital capacity, 375; blood calcium, 2; Widal test, 2; total, 21,790.

The laboratory work has increased in volume 3,000 determinations more than last year. The department has been very active in coöperating for diagnostic and prognostic purposes with all the various services—psychiatric, research and medical.

X-Ray Report

Parts Examined	Number of Patients.	Number of Films.
Arm	18	30
Ankle	20	25
Bones	18	18
Chest	231	170
Fluroscopy	108	0
Gall bladder	41	148
G. I. series	69	467
Hand	23	21
Heart	7	17
Hip	21	22
Humerus	4	9
Knee	18	25
Mandible	3	5
Mastoid	8	16
Neck	1	2
Ribs	9	10
Sella	54	74
Shoulder	22	34
Sinuses	72	205
Skull	71	140
Spine	15	25
Stomach	3	10
Teeth	122	270
Thumb	18	80
Tibia	1	1
Toe	4	4
Wrist	20	14
Elbow	10	8
Nose	5	7
Sacro-iliac joint	1	1
Colon	4	7
Leg	6	7
Foot	5	8
Jaw	16	19
Feet and ankles	12	12
Femur	1	1
Skull and sinuses	9	36
Knees and legs	6	24
Kidney	1	2
Dentals	115	325
Wrist and hand	7	7
Photographs	1	8

Parts Examined	Number of Patients.	Number of Films.
Special	10	15
Heel	1	1
Localization of hip	1	6
Finger prints	3	48
Total	1,216	2,384

Physical Therapy Report

In order to bridge the gap between medicine and surgery and to act as an adjunct to these two methods of maintaining health, a department of physical therapy was opened on April 26, 1929. The administration of treatments have been under the immediate charge of a single trained technician. The department is as yet in its infancy but we are rapidly becoming acquainted with the types of mental and physical disorders in which physical therapy may form an integral part of the treatment.

During the past seven months, 192 different patients have received a total of 3,414 treatments as listed in the classification below. At the time of this report there are over 120 patients on the waiting list for treatments in this department.

Employees' Clinic Report

Physical examinations, 358; treated at clinic, 469; smallpox vaccinations, 304; typhoid inoculations, 356; Schick tests, 10; total, 1,497.

This daily clinic, organized July 1, 1928, for the sole purpose of giving office examinations and treatments to our employees, has been found to be of distinct value to both the hospital and employees. That the clinic has been utilized may be noted from the above figures.

Surgical procedures were necessary on only 24 of our employees, as compared with 46 last year.

Miscellaneous

In addition to the service rendered to both patients and employees, there has been a complete reorganization of the record system of the medical and surgical service. From this there has evolved a system of standard practice whereby a detailed and rather complete record is maintained for every patient or employee coming within the jurisdiction of any of the above departments. This system has been of extreme value, not only for temporary purposes and references, but also for statistical surveys and relative analyses.

It has been the earnest endeavor of the medical and surgical service to coöperate with the administration, the other hospital services, and departments in helping to restore and maintain the health of both patients and employees. The relations of the above to the medical and surgical service have been very satisfactory during the past year.

Part 1 — General Information

Patients are received in this department only as referred cases. They may be referred from the patient population through the psychiatric, medical and surgical, or research services, and from the employee population they may be referred through any physician. Once referred, the responsibility of proper treatment lies, at the present time, entirely in the hands of the physician in charge of the medical and surgical services.

As soon as expedient, after a patient is referred, a diagnosis of the condition to be treated is made, and physical treatment outlined. This may be, and usually is, supplemented by other therapy—mental therapy, drug therapy, or by more than one type of physical therapy. This information is recorded by the physician, as well as a general statement regarding the patient and his condition—whether or not he is coöperative and what is hoped to be accomplished by the treatment outlined, etc.

With this information at hand, and not until then, the technician is allowed to carry on the treatment outlined. In cases where these treatments are extended over long periods, then rest periods are instituted from time to time as indicated. The treatments, although usually administered by the technician, are again the immediate responsibility of the physician in charge.

Treatments are discontinued and the case considered as "closed" under several conditions:—

(a) When the optimum effects have been reached by the treatment outlined. This approaches complete restoration to normal of the condition for which treatments were instituted.

(b) Failure on the part of the patient — failure to coöperate, failure to report for treatments, physical condition of the patient not warranting continuation of treatments, etc.

(c) Failure on the part of the type of therapy to produce the desired results.

(d) When a patient does not return for treatments within a week —this is usually applicable to the employee population.

(e) When there has not been complete restoration to normal, and further treatments might be of some help, but because of inconvenience to the patient, or some other similar reason, it is thought best to discontinue further treatments.

When treatments have been discontinued, and the case considered "closed," the physician makes a final note, describing briefly the end-results of treatment and classifying this by what we choose to call a "Physical Therapy Formula." This formula is modelled after the Moorehead Classification for the end-results of fractures in industrial surgical work, and is referred to as "P-F." There are three factors in the Formula, giving a percentage rating according to the importance of the factor:— (1) Symptoms of the condition relieved, 30%. (2) Signs of the condition relieved, 30%. (3) Function restored, 40%. Total, 100% for complete restoration to normal condition.

The end-result of treatment for every case is classified according to this formula, by the physician in charge. There may be errors in judging the results, perhaps too high or too low, but the comparative results should be valuable, particularly since they are all judged by one physician whose interest is perhaps primarily in physical therapy, but it is no more prejudiced in the treatment of pneumonia than it is in the treatment of alopecia, etc.

Once a series of treatments have been discontinued and the case classified, if the patient returns at a later date for further treatments for the same condition or for another condition, he is considered as a new case.

There are still other fields which have not even been touched. Such as the use of Physical Therapy in treating gonorrhea, in female pelvic conditions, in treating the psychoses and psychoneuroses as such, etc. These fields will be opened up during the coming year.

Report of Research Work

Francis H. Sleeper, M.D., Assistant Superintendent

The work during the past year has been continued along the lines discussed in previous reports. The main project, that of a study of the significant endocrine factors in schizophrenia, has been carried out as a conjoint research with the Memorial Foundation for Neuro-Endocrine Research. Dr. R. G. Hoskins, director of the Memorial Foundation for Neuro-Endocrine Research, has continued to serve in the capacity of consultant in therapeutic research, and as a result of his long experience and tremendous industry, the work of the Research Department has markedly increased over that of former years.

The various problems under study may be enumerated seriatim and comments offered on each:

1. *Endocrine Studies in Dementia Praecox* — including studies on the urine; basal metabolism; blood pressure, pulse; temperature; respiration; blood morphology; blood chemistry; phenolsulphonthalein output; galactose tolerance; weight; surface area; vital capacity; urobilinogen in the urine; alveolar-carbon dioxide; Van den Bergh tests, direct and indirect; Graham test; bromsulphthalein test; x-ray studies of the chest, sella, turcica, and sinuses; and gastro-intestinal tract series.

The studies are directed especially toward diagnosis of endocrine disorder but they afford also many data on the general physical and metabolic conditions.

2. *An Attempt to subdivide "Schizophrenia" on a Metabolic Basis into Valid Sub-Types.*

3. *Studies on the Autonomic Nervous System in Schizophrenia* — in collaboration with Dr. M. Yorshis. It is planned to make an extensive study of the autonomic system in both acute and chronic forms of schizophrenia and in the various sub-groups of the disorder. That widespread disturbances of autonomic functions occur is well known, but whether these are primary or secondary manifestations is problematic.

4. *The Effects of Gland products on the Mental Symptoms of Schizophrenia.* If the diagnostic studies indicate an endocrine disturbance, attempts are made to correct this disturbance in the hope of improving the mental condition. There is, seemingly, a close correlation between the efficacy of gland products available in each category and the clinical results obtained.

In the past year, even, there has been a tremendous advance in knowledge concerning the active principles of various gland products. During the past year, Thyroxin, an active principle of the thyroid gland, prepared by a new method, has become available. In two cases, we have had apparently brilliant results following its administration in schizophrenics.

The posterior lobe extract, through the work of Kamm and his associates, has been fractionated into two active components. The relative importance of each in our therapeutic report remains as yet largely to be determined.

The discovery recently has been made that the anterior lobe produces at least two entirely distinct hormones, one of which stimulates the growth processes, and one, sexual activity and development. We are receiving regular supplies of the sex-stimulating extract from two sources.

Adrenal cortex medication is frequently encountered in our therapeutic work. For several months one concern has been manufacturing an active preparation of adrenal cortex that can be administered by mouth. We have received one small lot to date, and the results from this lot were definitely encouraging.

Koch and his collaborators have recently evolved a potent extract of the male gonads. We hope to test this clinically in praecox within the next year.

5. *The effect of Glandular Medication on Physical and Metabolic Conditions of Man.* It will be recalled that a tremendous volume of data is accumulated on each individual patient studied, and the effects of medication are checked by a complete duplication of the work done at the beginning of the study. Here, then, we have the opportunity of checking the effects of the various glandular medications on the different studies made.

6. *Relative Efficacy of Various Commercial Preparations of Different Gland Derivatives.* There are numerous commercial firms supplying competing gland products. In this clinic, we are enabled to check the clinical effects of the different commercial preparations, one against the other, and note the relative efficacy of the products.

The manufacturers are decidedly coöperative, and practically all of the larger concerns manufacturing glandular products have supplied us with large quantities gratuitously.

7. *The effects of Vitamine Concentrates on the Symptoms of Schizophrenia.* As a matter of general policy, the hospital staff is interested in determining the helpful possibilities of the various methods of treatment other than glandular. The increasing of vitamine intake on the patient has been suggested as a promising field of research. During the past year a new commercial product of vitamine concentrates, "Vi-C", has been used in a considerable number of cases in which either satisfactory results are not obtained with glandular products now available, or in which it was thought that supplementary medication of this type might be helpful. At the present stage of the investigation, the product mentioned does not appear to be of any great value in the treatment of schizophrenia.

8. *The Effect of Calcium Medication on Nervous Irritability in Schizophrenia.* There is considerable evidence in the literature of a correlation between blood calcium concentration and nervous irritability. Considerable study has been made of the efficacy of calcium gluconate and of calcium lactate in the control of tenseness and agitation. In schizophrenia, calcium medication alone seems to have relatively little efficacy. This, however, is a tentative conclusion, as the work is not completed.

9. *The effect of Viosterol on the Efficacy of Ingested Calcium.* The fact that "Vitamine D" has an important relationship to calcium metabolism, suggested the desirability of attempting to promote the efficacy of calcium by the supplementary use of irradiated Ergosterol.

10. *The Effects of Bile Salts on the Assimilation of Gland Products.* An outstanding difficulty in endocrine therapy is that of getting the hormones absorbed effectively when administered by mouth. There is some evidence in the literature that absorption of drugs can be promoted by the use of bile salts.

11. *The Effects of Insulin on the Symptomatology of Schizophrenia.* There has been reported in the literature, where it is present, to increase the weight of mental patients by the use of Insulin. We have duplicated this work and are investigating the possibility that increased weight (hence of available energy) would be helpful in schizophrenia.

12. *The Effect of Insulin in Antidoting Certain By-Effects of Thyroid Medication.* The fundamental purpose in giving thyroid gland material to patients is to increase their fund of available energy. We are handicapped to some extent, however, by the toxic effects of thyroid on the heart and other organs. The possibility that such by-effects may be offset by the use of insulin is being investigated.

13. *The Practical Utility of the Intra-Nasal Route for the Administration of Pituitary Extracts.* At times it is quite difficult to get certain schizophrenics to swallow their medication. There is considerable evidence to the effect that certain gland products are readily absorbed from the nasal mucosa. This research is being carried out as a joint project between Dr. Hoskins and Dr. Thompson.

14. *A Study of Practical Criteria of the Basality in Alleged "Basal Metabolism" tests.* Determinations of the rate of basal metabolism play an important part in our studies and in similar studies. The technic of such tests presents several possibilities of errors. There are, however, certain objective criteria that aid in the detection of such errors. A considerable body of data on such criteria has been collected, and it is hoped to offer a quantitative analysis of them soon.

15. *The Effects of Repeated Oxygen-Carbon Dioxide Inhalations on the Mental Symptoms of Schizophrenia.* Recently Loevenhardt reported the discovery that breathing forty per cent of carbon dioxide in pure oxygen gas for five minutes has a remarkable effect on mute catatonics. The patients suddenly resumed contact with reality and seemed for a

brief interval to be nearly or completely free of their psychosis. After a few minutes they relapse again into catatonia. This fact seems to offer further support to the growing conviction that schizophrenia is primarily of organic causation.

16. *The Effects of Manganese Chloride on the Mental Symptoms of Schizophrenia.* Several investigators have recently reported that manganese chloride is frequently helpful in this disorder. It is possible that the manganese acts by catalyzing the oxidation processes of the brain cells. We are making a preliminary study of the possible efficacy of oral administration. We have used, to some extent, intramuscular administration of colloidal manganese, also.

17. *The Effects of Sodium Amytal on the Mental Symptoms of Schizophrenia.* At the last meeting of the Association for Research in Nervous and Mental Diseases, Lorenz and Bleckween reported very satisfactory results in schizophrenics following the use of sodium Amytal. They gave the medication intravenously the first day, and thereafter intramuscularly. The patients usually slept for several hours, at the end of which they were comparatively free from psychotic manifestations for several hours longer. We are using the material primarily to relieve the tenseness and agitation present in so many catatonics. The work is in too early a stage at the present time to discuss results.

18. *Electrocardiographic Studies of Bradycardia Occurring in Schizophrenia.* This is a joint research being conducted by Dr. Ackerly and Dr. Halloran, who is the electrocardiographer at the Worcester Memorial Hospital. It has been noted for a long time that patients suffering from schizophrenia frequently show a marked bradycardia. It was felt that electrocardiographic studies might be of great value in giving information as to the etiology of this particular phenomena.

19. *Studies in Malarial Treatment of General Paresis* had been continued by Dr. DeAsis to the time of his resignation, since which time they have been carried along under the direction of Dr. Perkins.

20. *The Use of Diathermy in the Treatment of General Paresis.* Although the malaria has given us our best therapeutic results in the treatment of general paresis, the fact that there is approximately eleven per cent mortality from the malaria suggests that some other method of treatment might be of value. Spontaneous rupture of the spleen occurred in the first one hundred cases given malaria in the hospital. Two of them died. It is fairly generally conceded that the general effect from malarial therapy is derived from the production of heat in the individual. We have run several cases through with diathermy to date under the immediate supervision of Dr. Perkins, but it is too early as yet to draw any conclusions regarding the therapeutic value of the technic.

21. *Psychological Researches under Dr. D. A. Shakow.*

1. *Test work* (Outside of the routine testing).

A. *Administration to Psychotics of:*—Perseveration test. Color Blindness test. Eyedness test (Parson). Introversion Extroversion test. (G. E. A. B. form: Kohlstedt—Neymann) Heilbronner apperception test. Ascendance — Submission test (Allport).

B. *Standardization on Normals:* — Perseveration test (paper and performance types). Psychomotor learning. Wells Memory Test (restandardization). Shakow-Kent Symbol Digit Test. Heilbronner apperception test. Kent-Shakow Formboard Series.

C. *Development of New Tests:* — Perseveration test. Formboard test.

D. *Special Groups Tested:* — Elaborate (3-4 hour) examination of dementia praecox on research — repeated every three months. Attendants. Memory in Alcoholics. Association in dementia praecox and manic depressive. Elaborate (3-4 hour) examination of general paretics before and after malarial treatment.

E. *Analysis of Test Results:*—Problem of "Scatter" on the Stanford-Binet. Analysis of records of last five years. Effect of time limit on achievement in group tests by dementia praecox.

2. *Experimental:* Effect of extra-attentional factors on judgment. Effect of rhythmic stimuli on patients in packs. Suggestibility in psychotics.

3. *Others:* Regular observation of praecox on research in special observation room. Survey of employment situation of attendants.

Projected Research: The effect of isolation on behavior in animals. The "Motor-Representation" method (Luria) in psychosis. Rohrschach test in psychosis (with Yorshis). Dreams of Psychotics (with Ackerly and Yorshis).

22. *Publications:*

1. "The Effect of Ingested Thyroid in the Blood Morphology of Man" — Drs. Hoskins and Sleeper. Endokrinologie, *5:* 89-103. 1929.

2. "Basal Metabolism in Schizophrenia" — Drs. Hoskins and Sleeper. Arch. Neurol. & Psychiat., *21;* 887-900. 1929.

3. "Endocrine Studies in Dementia Praecox" — Drs. Hoskins and Sleeper. Endocrinology, *13:* 245-265. 1929.

4. "A Case of Hebephrenic Dementia Praecox with Improvement under Thyroid Medication" — Drs. Hoskins and Sleeper. Endocrinology, *13:* 459-466. 1929.

5. "Malaria as a Therapeutic Agent for Paresis" — Dr. DeAsis. Arch. Neurol. & Psychiat., *22:* 752-766. 1929.

6. "The Effect of Hypnosis on Basal Metabolism" — Dr. Goldwyn. Arch. Internal Medicine, *45:* 109-114. 1930.

Summary of Endocrine Research in Dementia Praecox

To date, a total of 129 patients have been significantly studied. Of these, 70 cases have been discontinued. In ten cases the patients escaped, were transferred or died, leaving 60 complete cases. Of the 60, 24 patients or forty per cent, have been sent home. An equal number were given up as relatively "hopeless", and of the 59 cases now under study, 9 have not yet been significantly treated. Of the remaining 50, 20 or forty per cent, have shown significant degrees of improvement under treatment. In one of the 50 have all the therapeutic possibilities been exhausted.

The problem of schizophrenia presents many aspects imperatively in need of study. In this report, a few of these aspects are considered.

Research work in this institution is carried out on a very broad basis, and practically every member of the Staff is responsible, to a greater or lesser degree, for all research work emanating from this institution.

Report of the Out-Patient Department

S. W. Hartwell M.D., Director of Child Guidance Clinic

I. *The Out-Patient Treatment Clinic:* With the coöperation of the Social Service Department of the hospital an attempt has been made throughout the year to follow and give advice and treatment interviews to all patients who are on visit from the hospital. To do this, regular monthly clinics have been held on afternoons and evenings the second Monday of each month at the Summer Street Department of the hospital. These were conducted personally by the physician in charge of the Out-Patient-Department. Nearly every patient whose visit expired during the year was seen in this way several times, and invariably seen before being finally discharged. Others whose visit did not expire, or who for therapeutic or other reasons were continued home on visit were seen at regular intervals in this clinic.

It became evident as the year passed that the only day a month plan was inadequate to properly serve the increasing number of interviews desired by the patients who were on visit. They were frequently coming without an appointment and many of them were coming more frequently than they were given appointments for. These patients many of them, often expressed the wish that they might see the particular doctor of the staff who had treated them in the hospital during their residence there.

For these reasons, at the end of the hospital year, a change in this system was made. During the next year the plan to be in operation is as follows: When the patient is discharged on visit he is given a card giving him the name of the member of the staff whom he is to see for treatment and follow-up interviews during his visit. The staff member is usually the one who has had most contacts with the patient during his period of residence in the hospital. He is given the first appointment to return and see this particular physician and he is told that he is to feel free to come as often as he wishes to make appointments. It is felt that in this way, treatment already begun, may be more successfully carried out, that patient will feel free to come back and that each physician will have not only the opportunity of observing the results of earlier treatment and social suggestions given, but he also will be getting the experience of extramural psychiatry.

It is felt, that without a doubt, many patients having been discharged on visit during the year, have made better adjustments and have advanced toward complete cure more successfully because of the Out-Patient Department Clinic, as it has been conducted. It is to be hoped that the new method will be even more helpful.

11. *Examination of retarded school Children: Under the Massachusetts Law:* Under the division made by the State this hospital has assigned to it fifty-nine towns where clinics are to be conducted annually, if necessary. In no one year do all the towns need the examination of children two or more years retarded. During the year ending September 30, 1929, clinics were conducted in the following twenty-four localities: Oxford, Southborough, Northborough, Jefferson, Holden, Wayland, Cochituate, Sudbury, Boylston, Shrewsbury, Princeton, Westminster, Sterling, Millville, Blackstone, Leicester, Clinton, Ayer, Farnumsville, Fisherville, Grafton, Saundersville, Paxton, and Holden.

At the beginning of the school year all the school superintendents in these towns are notified by letter of our desire to make advance appointments for these clinics and superintendents are requested to report as to whether or not they will have children to be examined during the school year. This year all superintendents so requested responded either by asking for a date or by saying that there would be no children to be examined.

During the year a total of 299 children were examined, 98 of whom were found to be technically feebleminded. The staff for these travelling school clinics consisted of the psychiatrist (physician in charge of the Out-Patient Department), three psychologists and one social worker. Usually about eight children, never more than ten are examined in one full day by this staff. Following the clinic and staff conference on all cases examined, a summary of the findings, both psychological and psychiatric are made. An appointment is then made with the superintendent of the school to meet him, his school nurse and his teachers interested, for a general discussion of these cases. At this time final recommendations are made. The life of each individual child is discussed with his group. It has been found that the members of these groups are much interested in the discussion of their problems from a psychological and psychiatric angle. Very often opportunities arise to give constructive suggestions along the line of Child Guidance and Mental Hygiene as applies to the school teacher and her work.

We find a number of schools and communities badly in need of special classes where none is provided. The superintendent of these school systems always report local antagonism at the establishment of such classes. This feeling is based, first on the additional cost to the school system and second on the general feeling in the community that there is "some disgrace" attached to the child and his family if placed in a special class. Educational propaganda, to overcome these attitudes, is badly needed in many of the communities served by the Travelling School Clinic.

It has been found that an increasing demand on this Travelling Clinic is being made to have the psychiatrist see children for other reasons than school retardation. Under the law this is possible with the written consent of the parents and it has been done in a considerable number of cases throughout the year. From an educational standpoint this is probably a desirable procedure but from the standpoint of giving real and constructive advice to those in charge of these children with personality problems, we feel that the general practice would not be advisable and of course, the type of treatment that a psychiatrist might give the child himself in one interview, conducted in a school clinic, is very limited. Our feeling is that in communities served by the Child Guidance Clinic that behavior and personality problem children, not retarded in school, should not be studied in the travelling school clinic. However, the clinic does serve a very useful function in regards these cases in that such children may be superficially investigated by the social worker and psychiatrist at the time of visit to the school and advice given as to the wisdom of referring them, for a thorough study, to the child Guidance Clinic.

III. *Worcester Child Guidance Clinic:* This branch of the Out-Patient Department work is now eight years old. From a small beginning it has grown steadily until it is now one of the large Child Guidance Clinics of the country.

The Clinic is located in the building of the Out-Patient Department of Memorial Hospital. The hospital furnishes quarters, rent, light and heat free and the Worcester Welfare Federation contributes materially to the expense of the clinic. The chief Social Worker's salary, the office supplies and the stenographic help are thus furnished. The Worcester State Hospital maintains it in all other expenses.

During the year the clinic has expanded. Until the first of August the psychiatric service consisted in one physician two days a week. Since then the director of the clinic has spent his entire time there. In addition to this the former director has spent two afternoons a week in Child Guidance Work. The remainder of the staff consists in chief Social Service Worker, Volunteer Social Service Worker, four Smith College students, two of whom are in the clinic at all times, one full and one part time psychologist and one stenographer.

During the year there have been studied 164 new cases. Thirty-two old cases have been reopened and seventeen cases were carried through as treatment problems from the previous year into this one. The sources of these cases are as follows: Schools 24; from parents 26; other hospitals and clinics 34; social agencies 20; court 22; miscellaneous 38. At present the average time spent with each case is approximately thirty hours. Counting only such cases as are taken for psychiatric or psychological treatment the average time spent is approximately seventy hours. In some cases presenting particularly difficult personality problems, in which a serious attempt is to be made to alter the mental life of the child, much more time is spent.

We have several cases who have occupied more than two hundred hours of the time of the psychiatrist, psychologist and social worker. The average for the children seen during this year was between ten and eleven years. About twenty per cent of the children seen were borderline or lower in their mentality while approximately thirty per cent were classed high normal or superior by the psychologists.

As regards the problems presented by these children we find that, roughly by dividing them into groups, the following is the situation.

	Chief Problem.	Secondary Problem.
Mentality	41	62
Behavior	52	36
Environmental	36	29
Personality	35	37

Four general types of service is given these cases. First the cases that are studied only as a diagnostic way. These are largely cases involving mental equipment of serious school problems, or of cases of children for adoption. In this group also comes a part of the speech defect cases. Second those studied and records closed by the clinic after social and psychiatric advice has been given to those referring the child. Third, children with whom the clinic maintains relations and the case is not quickly closed because of social adjustments, only, that must be made for the child. Fourth and the largest group are those who are not only studied and advice formulated but who are kept as psychiatric treatment cases. This group includes all those children who have, as a part of their personality problem, traits that are interfering with their good adjustment to life or who are thought by the clinic to be indulging in mental habits that will later cause trouble of any kind for the child. For these children regular and often long continued series of interviews and other contacts are arranged for. Very careful case records covering both the social and the psychiatric records on the case are kept.

We feel that this latter group constitutes the more important part of the Child Guidance Clinic as its functioning as a part of the Out-Patient Department of the Worcester State Hospital but of nearly equally importance is the attempt that the members of the staff are making along the lines of community education. The psychiatrist, the psychologists and chief Social Service Worker are always available to give talks or conduct forums for groups of people interested in mental hygiene and child guidance. During the past year more than sixty of such talks or addresses have been given by the staff and there is a constantly increasing demand for this service.

At present the Child Guidance Clinic is serving and coöperating with more than thirty various hospitals, schools, young people's clubs and societies and all of the various social agencies organized in the City of Worcester.

The Child Guidance Association Society consists of an executive committee, board of directors and general membership. Our executive committee meets monthly, the board of directors every three months and the entire society annually. Practically the entire membership of these various groups attend at the meetings and see dynamic and helpful interest taken in all clinics by our executive committee and board.

It is expected that provision will be made by the legislature at present in session for the considerable expansion of the activities of this clinic during the year to come.

General Repair Work

The regular repair work of the hospital has been kept throughout the year, and the buildings are in fairly good condition. The Officers' Cottages have been completed and are a valuable addition. They are now occupied by the Assistant Superintendent and Clinical Director.

Recommendations: A program of floor replacements in the hospital which will proceed more rapidly than has been the case in the past is indicated. The old wooden floors have been in place many years, and should be replaced preferably with reinforced cement floors on top of which linoleum can be placed. This would make the building absolutely fireproof.

The porches throughout the hospital are in a bad state of repair and several of them have been condemned and cannot be used by patients. These should be replaced by brick and concrete structures as soon as funds will permit. A general over-hauling of both the roofs of the main building and Summer Street is imperative at an early date. The Summer Street roof should be completely replaced and the roof at the main building should have considerable work done on it.

We have requested this year an appropriation in addition to our regu-

lar maintenance for carrying on both research work in the hospital and child guidance work in the community. In my opinion the time has arrived when some other method of meeting the increasing demands upon the State for more housing facilities should be carefully scrutinized with the idea of making an attempt to solve the problem in some other way. It would seem that some money could be diverted for research into the causes and prevention of mental disease, and it is my earnest recommendation that this program be pursued for a sufficient length of time to enable us to ascertain if more patients cannot be returned into the community. I believe that the important thing to accomplish this end is a personnel. If more patients could be discharged from the hospital and adequately supervised in the community it would seem obvious that an increase in the force of social workers would be an excellent investment for the State.

In conclusion I wish to express my sincere thanks and appreciation for the loyalty and efficiency of the officers and employees of the hospital. They have made possible any progress that has been manifested during the year in the work of the institution. I also wish to thank the Board of Trustees for the support and encouragement the members have given me at all times.

Respectfully submitted,

WILLIAM A. BRYAN,
Superintendent.

VALUATION.

November 30, 1929.

Real Estate.

Land, 589.16 acres	$438,200.00
Buildings	2,161,914.66
	$2,600,114.66

Personal Property.

Travel, transportation and office expenses	$6,374.58
Food	12,286.44
Clothing and materials	28,807.77
Furnishings and household supplies	281,930.19
Medical and general care	26,146.19
Heat, light and power	12,923.06
Farm	41,385.08
Garage, stables and grounds	9,957.77
Repairs	23,412.44
	$443,223.52

Summary.

Real estate	$2,600,114.66
Personal property	443,223.52
	$3,043,338.18

FINANCIAL REPORT.

To the Department of Mental Diseases

I respectfully submit the following report of the finances of this institution for the fiscal year ending November 30, 1929.

Cash Account.

Receipts.

Income.		
Board of Patients	$101,130.00	
		$101,130.00
Personal Services:		
Reimbursement from Board of Retirement		280 21
Sales:		
Food	$1,557.38	
Clothing and materials	62.70	
Furnishings and household supplies	85.55	
Medical and general care	153.48	
Heat, light and power	25.60	

Farm:		
Cows and calves	$485.53	
Pigs and hogs	48.00	
Hides	60.94	
Hay	44.00	
Sundries	23.00	
Garage, stable and grounds	62.81	
Repairs, ordinary	109.92	
Total sales		$2,718.91
Miscellaneous:		
Interest on bank balances	$1,762.34	
Rent	501.50	
		2,263.84
Total income		$106,392.96

MAINTENANCE.

Balance from previous year, brought forward	$17,758.42
Appropriations, current year:	
Maintenance	871,410.00
Total	$889,168.42
Expenses (as analyzed below)	845,376.61
Balance reverting to Treasury of Commonwealth	$43,791.71

Analysis of Expenses.

Personal services	$417,300.20
Religious instruction	2,620.00
Travel, transportation and office expenses	9,944.71
Food	170,887.74
Clothing and materials	18,669.02
Furnishings and household supplies	38,459.61
Medical and general care	40,330.73
Heat, light and power	72,800.53
Farm	30,688.41
Garage, stable and grounds	7,791 91
Repairs, ordinary	20,565.22
Repairs and renewals	15,318.53
Total expenses for Maintenance	$845,376.61

SPECIAL APPROPRIATIONS.

Balance December 1, 1928		$14,394.46
Appropriations for current year		42,000.00
Total		$56,394.46
Expended during the year (see statement below)	$12,825.05	
Reverting to Treasury of Commonwealth		12,825.05
Balance November 30, 1929, carried to next year		$43,569.41

Object.	Act or Resolve.	Whole Amount.	Expended During Fiscal Year.	Total Expended to Date.	Balance at End of Year.
Boilers	1927–138	$42,000.00	$4,481.22	$41,993.07	$6.93
Water Supply, Hillside Colony	1927–138	4,500.00	–	–	4,500.00
Officers' Cottages	1928–127	12,000.00	5,400.20	11,993.89	6.11
Officers' Cottages, 1929	1929–146	12,000.00	1,193.17	1,193.17	10,806.83
Cow and Hay Barns	1929–146	30,000.00	1,750.46	1,750.46	28,249.54
		$100,500.00	$12,825.05	$56,930.59	$43,569.41

Balance reverting to Treasury of the Commonwealth during year (mark item with *)	–
Balance carried to next year	$43,569.41
Total as above	$43,569.41

PER CAPITA.

During the year the average number of inmates has been 2,241.89.
Total cost for maintenance, $845,376.61.
Equal to a weekly per capita cost of $7.2515 (52 weeks to year).
Receipt from sales, $2,718.91.
Equal to a weekly per capita of $.0233.
All other institution receipts, $103,674.05.
Equal to a weekly per capita of $.8893.
Net weekly per capita $6.3389.

Respectfully submitted,

JESSIE M. D. HAMILTON, *Treasurer.*

STATEMENT OF FUNDS.

Patient's Fund.

Balance on hand November 30, 1928	$19,338.13	
Receipts	27,546.75	
Interest	843.53	
		$47,728.41
Refunded	$25,935.49	
Interest paid to State Treasurer	843.53	
		26,779.02
		$20,949.39

Investment.

Worcester County Institution for Savings	$2,000.00
Worcester Five Cents Savings Bank	2,000.00
Worcester Mechanics Savings Bank	2,000.00
Peoples Savings Bank	3,000.00
Bay State Savings Bank	3,000.00
Balance Worcester Bank and Trust Company	8,538.99
Cash on hand December 1, 1929	410.40
	$20,949.39

Lewis Fund.

Balance on hand November 30, 1928	$1,562.99	
Income	148.35	
		$1,711.34
Expended for entertainments, etc.		43.70
		$1,667.64

Investment.

Millbury Savings Bank	$634.26
Worcester Five Cents Savings Bank	1,000.00
Balance Worcester Bank and Trust Company	33.38
	1,667.64

Wheeler Fund.

Balance on hand November 30, 1928	$6,090.34	
Income	597.36	
		$6,687.70
Expended for entertainments, etc.		304.48
		$6,383.22

Investment.

Grafton Savings Bank	$4,000.00
Millbury Savings Bank	1,374.22
Worcester Mechanics Savings Bank	1,000.00
Balance Worcester Bank and Trust Company	9.00
	$6,383.22

Manson Fund.

Balance on hand November 30, 1928	$1,170.13	
Income	55.23	
		$1,225.36
Expended for entertainments, etc.		38.58
		$1,186.78

Investment.

Millbury Savings Bank	$1,162.80
Balance Worcester Bank and Trust Company	23.98
	$1,186.78

Clement Fund.

Amount of bequest	$1,000.00	
Income	15.94	
		$1,015 94
Expended for patient's comfort		15.94
		$1,000.00

Investment.

Worcester County Institution for Savings	$1,000.00

Respectfully submitted,

JESSIE M. D. HAMILTON, *Treasurer.*

November 30, 1929.

STATISTICAL TABLES.

As Adopted by the American Psychiatric Association.

Prescribed by Massachusetts Department of Mental Diseases.

Table I. *General Information.*

1. Date of opening as an institution for the insane: Jan. 18, 1833.
2. Type of institution: State.
3. Hospital plant:
   Value of hospital property:

Real estate, including buildings	$2,600,114.66
Personal property	443,223.52
Total	$3,043,338.18

   Total acreage of hospital, 589.16 acres.
   Acreage under cultivation during previous year, 175.00 acres.
4. Medical service:

	Men.	Women.	Totals
Superintendent	1	–	1
Assistant Physicians	8	1	9
Medical Internes	2	–	2
Dentist	1	–	1
Total physicians	12	1	13

5. Employees on pay roll (not including physicians):

	Men.	Women.	Totals.
Graduate nurses	2	37	39
Other nurses and attendants	110	112	222
All other employees	101	75	176
Total employees	213	224	437

6. Patients employed in industrial classes or in general hospital work on date of report: 799 641 1,440
7. Patients in institution on date of report (excluding paroles): 1,113 1,160 2,273

Note: — The following items, 8–13, inclusive, are for the year ended September 30, 1929.

8. Census of patient population at end of year:

	Actually in Hospital.			Absent from Hospital but Still on Books.		
	M.	F.	T.	M.	F.	T.
White:						
Insane	1,048	1,095	2,143	157	142	299
Epileptics	–	1	1	–	–	–
Mental defectives	12	24	36	3	4	7
Alcoholics	1	–	1	–	–	–
All other cases	7	3	10	1	–	1
Total	1,068	1,123	2,191	161	146	307
Other races:						
Insane	31	30	61	2	3	5
Mental defectives	–	1	1	–	–	–
Total	31	31	62	2	3	5
Grand Total	1,099	1,154	2,253	163	149	312

9. Patients under treatment in occupational-therapy classes, including physical training, on date of report: 85 129 214
10. Other patients employed in general work of hospital on date of report: 714 512 1,226
11. Average daily number of all patients actually in hospital during year: 1,090.92 1,141.62 2,232.54
12. Voluntary patients admitted during year: 8 9 17
13. Persons given advice or treatment in out-patient clinics during year: 402 316 718

Table 2. *Financial Statement.*

See Treasurer's report for data requested under this table.

NOTE: — The following tables, 3–19, inclusive, are for the year ended September 30, 1929.

TABLE 3. *Movement of Patient Population.*

	INSANE.			SANE VOLUNTARY.			TEMPORARY CARE AND OBSERVATION.			TOTAL ON BOOKS.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Patients on books of Institution Sept. 30, 1928	1,272	1,285	2,557	6	6	12	12	13	25	1,290	1,304	2,594
Admissions during year:												
First admissions	234	178	412	1	2	3	59	18	77	294	198	492
Readmissions	41	30	71	1	1	2	8	3	11	50	34	84
Transfers from other hospitals for mental diseases	8	29	37	–	–	–	–	–	–	8	29	37
Total received during year	283	237	520	2	3	5	67	21	88	352	261	613
Total on books during year	1,555	1,522	3,077	8	9	17	79	34	113	1,642	1,565	3,207
Discharged from books during year:												
As recovered	3	–	3	–	–	–	20	1	21	23	1	24
As improved	87	92	179	2	3	5	4	3	7	93	98	191
As unimproved	91	26	117	–	–	–	6	4	10	97	30	127
As without psychosis	1	3	4	1	1	2	26	9	35	28	13	41
Transferred to other hospitals for mental diseases	15	9	24	–	–	–	–	–	–	15	9	24
Died during year	113	105	218	–	–	–	11	6	17	124	111	235
Total discharged, transferred and died during year	310	235	545	3	4	7	67	23	90	380	262	642
Insane patients remaining on books of hospital at end of hospital year:												
In hospital	1,084	1,147	2,231	5	3	8	10	4	14	1,099	1,154	2,253
On parole or otherwise absent	162	148	310	–	–	–	1	1	2	163	149	312
Total on books September 20, 1929*	1,246	1,295	2,541	5	3	8	11	5	16	1,262	1,303	2,565

* Owing to a change in criteria, to prevent the counting of one patient twice on successive statistical years, the totals in the Insane, Voluntary and Temporary Care columns will not balance for the statistical year 1929, but will balance in future years.

TABLE 4. *Nativity of First Admissions and of Parents of First Admissions.*

NATIVITY.	PATIENTS.			PARENTS OF MALE PATIENTS.			PARENTS OF FEMALE PATIENTS.		
	M.	F.	T.	Fathers.	Mothers.	Both Parents.	Fathers	Mothers.	Both Parents.
United States	139	104	243	60	53	48	57	55	49
Austria	1	–	1	1	–	–	–	–	–
Canada[1]	15	19	34	31	31	27	28	30	23
Central America	1	–	1	–	–	–	–	–	–
Czechoslovakia	–	1	1	–	–	–	1	1	1
England	4	2	6	11	7	6	5	4	3
Finland	2	4	6	5	5	5	4	4	4
France	1	–	1	1	1	1	1	–	–
Germany	2	2	4	5	5	5	6	6	6
Greece	5	–	5	4	4	4	1	1	1
Holland	1	–	1	2	2	2	–	–	–
Ireland	13	17	30	34	41	34	33	33	32
Italy	11	2	13	12	12	12	3	3	3
Norway	2	–	2	3	3	3	–	–	–
Poland	10	10	20	10	10	9	9	9	9
Russia	8	1	9	12	12	12	3	4	3
Scotland	–	3	3	2	1	1	3	4	3
South America	–	–	–	–	1	–	–	–	–
Spain	–	–	–	–	1	–	–	–	–
Sweden	4	6	10	8	7	7	8	8	8
Turkey in Europe	–	–	–	2	2	2	–	–	–
West Indies[2]	2	1	3	2	2	2	1	1	1
Other countries	11	4	15	12	12	12	7	6	6
Unascertained	2	2	4	17	22	17	8	9	7
Total	234	178	412	234	234	209	178	178	159

[1] Includes Newfoundland.

[2] Except Cuba and Porto Rico.

TABLE 4–A. *Age of First Admissions Classified with Reference to Nativity, and Length of Residence in the United States of the Foreign Born.*

AGE GROUPS.	Aggregate.			NATIVE BORN.													FOREIGN BORN.													
				Total.			PARENTAGE.										Total.			TIME IN UNITED STATES BEFORE ADMISSION.											
							Native.			Foreign.			Mixed.			Unascertained.				Under 5 yrs.			5–9 years.			10–14 years.			15 years and over.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Under 15 years	3	3	6	3	3	6	1	2	3	2	1	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15–19 years	6	9	15	6	7	13	1	4	5	4	1	5	1	2	3	–	–	–	–	2	2	–	1	1	–	–	–	–	–	–	–	1	1
20–24 years	13	12	25	11	11	22	2	4	6	6	4	10	2	2	4	1	1	2	2	1	3	1	–	1	1	1	2	–	–	–	–	–	–
25–29 years	18	15	33	13	11	24	4	6	10	4	1	5	4	4	8	1	–	1	5	4	9	–	1	1	1	2	3	–	–	–	4	1	5
30–34 years	14	12	26	9	6	15	2	1	3	4	2	6	2	3	5	1	–	1	5	6	11	–	2	2	2	–	2	–	1	1	3	3	6
35–39 years	28	24	52	19	13	32	7	4	11	8	7	15	2	1	3	2	1	3	9	11	20	–	1	1	3	–	3	1	–	1	5	10	15
40–44 years	33	13	46	19	3	22	11	2	13	3	–	3	3	–	3	2	1	3	14	10	24	–	–	–	1	–	1	3	1	4	10	9	19
45–49 years	23	15	38	7	8	15	3	4	7	4	3	7	–	1	1	–	–	–	16	7	23	1	1	2	1	–	1	1	–	1	13	6	19
50–54 years	18	15	33	10	7	17	1	2	3	4	3	7	4	2	6	1	–	1	8	8	16	1	–	1	–	–	–	–	–	–	7	8	15
55–59 years	17	10	27	8	5	13	1	4	5	5	1	6	1	–	1	1	–	1	9	5	14	–	–	–	–	–	–	–	–	–	9	5	14
60–64 years	16	11	27	7	7	14	3	3	6	1	2	3	1	1	2	1	1	3	9	4	13	–	–	–	–	–	–	–	–	–	9	4	13
65–69 years	19	8	27	10	5	15	4	2	6	4	1	5	–	2	2	2	–	2	9	3	12	–	–	–	–	–	–	–	–	–	9	3	12
70 yrs. and over	26	31	57	17	18	35	8	11	19	4	6	10	3	–	3	2	1	3	9	13	22	–	–	–	–	–	–	–	–	–	9	13	22
Total	234	178	412	139	104	243	48	49	97	53	32	85	23	18	41	15	5	20	95	74	169	3	6	9	9	3	12	5	2	7	78	63	141

Table 5. *Citizenship of First Admissions.*

	Males.	Females.	Total.
Citizens by birth	139	104	243
Citizens by naturalization	30	32	62
Aliens	54	34	88
Citizenship unascertained	11	8	19
Total	234	178	412

Table 6. *Psychoses of First Admissions.*

Psychoses.	M.	F.	T.	M.	F.	T.
1. Traumatic psychoses				1	–	1
2. Senile psychoses				19	32	51
3. Psychoses with cerebral arteriosclerosis				26	20	46
4. General paralysis				33	9	42
5. Psychoses with cerebral syphilis				1	1	2
6. Psychoses with Huntington's chorea						
7. Psychoses with brain tumor						
8. Psychoses with other brain or nervous diseases, total				6	2	8
Other diseases	6	2	8			
9. Alcoholic psychoses, total				47	3	50
Delirium tremens	1	–	1			
Korsakow's psychosis	6	–	6			
Acute hallucinosis	8	–	8			
Other types, acute or chronic	32	3	35			
10. Psychoses due to drugs and other exogenous toxins, total				1	2	3
Opium (and derivatives), cocaine, bromides, chloral, etc., alone or combined	–	1	1			
Other exogenous toxins	1	1	2			
11. Psychoses with pellagra				1	–	1
12. Psychoses with other somatic diseases, total				12	8	20
Post-infectious psychosis	–	1	1			
Exhaustion delirium	–	2	2			
Cardio-renal diseases	3	–	3			
Other diseases or conditions	9	5	14			
13. Manic-depressive psychoses, total				15	13	28
Manic type	7	6	13			
Depressive type	7	5	12			
Other types	1	2	3			
14. Involution melancholia				1	11	12
15. Dementia præcox (schizophrenia)				53	40	93
16. Paranoia and paranoid conditions				7	12	19
17. Epileptic psychoses				–	2	2
18. Psychoneuroses and neuroses, total				1	6	7
Hysterical type	–	3	3			
Psychasthenic type (anxiety and obsessive forms)	–	2	2			
Neurasthenic type	–	1	1			
Other types	1	–	1			
19. Psychoses with psychopathic personality				1	8	9
20. Psychoses with mental deficiency				5	8	13
21. Undiagnosed psychoses				1	–	1
22. Without psychosis, total				3	1	4
Psychopathic personality without psychosis	1	–	1			
Mental deficiency without psychosis	2	1	3			
Total				234	178	412

TABLE 7. *Race of First Admissions Classified with Reference to Principal Psychoses.*

RACE.	Total.			Traumatic.			Senile.			With cerebral arterio-sclerosis.			General paralysis.			With cerebral syphilis.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	9	5	14	–	–	–	1	–	1	–	1	1	4	–	4	–	–	–
Armenian	5	–	5	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
Dutch and Flemish	3	–	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
English	11	5	16	–	–	–	2	–	2	2	1	3	3	–	3	–	–	–
Finnish	4	4	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
French	22	23	45	–	–	–	3	2	5	4	2	6	5	3	8	–	–	–
German	5	5	10	–	–	–	1	2	3	1	–	1	1	–	1	–	–	–
Greek	5	1	6	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
Hebrew	6	5	11	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Irish	38	33	71	–	–	–	4	9	13	5	8	13	3	–	3	1	1	2
Italian[1]	12	3	15	–	–	–	–	–	–	1	–	1	1	–	1	–	–	–
Lithuanian	7	5	12	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Magyar	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Scandinavian[2]	11	8	19	–	–	–	–	1	1	–	1	1	2	–	2	–	–	–
Scotch	2	4	6	–	–	–	–	2	2	–	1	1	–	–	–	–	–	–
Slavonic[3]	15	10	25	–	–	–	–	–	–	–	–	–	2	1	3	–	–	–
Spanish-American	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Syrian	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other specific races	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mixed	63	58	121	–	–	–	5	12	17	10	6	16	10	5	15	–	–	–
Race unascertained	13	8	21	–	–	–	3	4	7	2	–	2	–	–	–	–	–	–
Total	234	178	412	1	–	1	19	32	51	26	20	46	33	9	42	1	1	2

TABLE 7. *Race of First Admissions Classified with Reference to Principal Psychoses* — Continued.

RACE.	With Huntington's chorea.			With brain tumor.			With other brain or nervous diseases.			Alcoholic.			Due to drug and other exogenous toxins.			With pellagra.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	–	–	–	–	–	–	1	–	1	1	–	1	–	–	–	–	–	–
Armenian	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Dutch and Flemish	–	–	–	–	–	–	–	–	–	2	–	2	–	–	–	–	–	–
English	–	–	–	–	–	–	1	1	2	2	–	2	–	–	–	–	–	–
Finnish	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
French	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
German	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
Greek	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
Hebrew	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Irish	–	–	–	–	–	–	–	–	–	12	1	13	1	–	1	1	–	1
Italian[1]	–	–	–	–	–	–	1	–	1	3	–	3	–	–	–	–	–	–
Lithuanian	–	–	–	–	–	–	–	–	–	4	–	4	–	–	–	–	–	–
Magyar	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Scandinavian[2]	–	–	–	–	–	–	–	–	–	2	–	2	–	–	–	–	–	–
Scotch	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Slavonic[1]	–	–	–	–	–	–	2	–	2	5	1	6	–	–	–	–	–	–
Spanish-American	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Syrian	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other specific races	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mixed	–	–	–	–	–	–	1	–	1	11	1	12	–	1	1	–	–	–
Race unascertained	–	–	–	–	–	–	–	–	–	2	–	2	–	–	–	–	–	–
Total	–	–	–	–	–	–	6	2	8	47	3	50	1	2	3	1	–	1

[1] Includes "North" and "South."
[2] Norwegians, Danes and Swedes.
[3] Includes Bohemian, Bosnian, Croatian, Dalmatian, Herzegovinian, Montenegrin, Moravian, Polish, Russian, Ruthenian, Servian, Slovak, Slovenian.

TABLE 7. *Race of First Admissions Classified with Reference to Principal Psychoses* — Continued.

RACE.	With other somatic diseases.			Manic-depressive.			Involution melancholia.			Dementia præcox.			Paranoia and paranoid conditions.			Epileptic psychosis.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	–	–	–	–	1	1	–	–	–	2	2	4	–	1	1	–	–	–
Armenian	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Dutch and Flemish	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
English	–	–	–	–	1	1	–	–	–	1	–	1	–	–	–	–	–	–
Finnish	–	1	1	–	–	–	–	1	1	3	2	5	–	–	–	–	–	–
French	3	2	5	–	1	1	–	1	1	5	7	12	1	1	2	–	1	1
German	–	–	–	–	–	–	–	1	1	1	–	1	–	–	–	–	–	–
Greek	–	–	–	1	–	1	–	–	–	3	–	3	–	–	–	–	–	–
Hebrew	–	1	1	3	2	5	–	–	–	3	–	3	–	–	–	–	–	–
Irish	2	1	3	4	1	5	–	2	2	3	8	11	2	2	4	–	–	–
Italian[1]	–	–	–	2	–	2	–	–	–	3	–	3	1	1	2	–	–	–
Lithuanian	–	–	–	–	1	1	–	–	–	1	2	3	1	1	2	–	–	–
Magyar	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
Scandinavian[2]	1	–	1	–	–	–	1	1	2	4	2	6	–	–	–	–	–	–
Scotch	–	–	–	–	–	–	–	–	–	1	–	1	–	1	1	–	–	–
Slavonic[3]	1	2	3	1	–	1	–	2	2	4	1	5	–	2	2	–	–	–
Spanish-American	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Syrian	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
Other specific races	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
Mixed	3	1	4	3	5	8	–	3	3	15	13	28	–	2	2	–	1	1
Race unascertained	1	–	1	1	–	1	–	–	–	2	3	5	–	1	1	–	–	–
Total	12	8	20	15	13	28	1	11	12	53	40	93	7	12	19	–	2	2

TABLE 7. *Race of First Admissions Classified with Reference to Principal Psychoses* — Concluded.

RACE.	Psycho-neuroses and neuroses.			With psycho-pathic personality.			With mental deficiency.			Un-diagnosed psychoses.			Without psychosis.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Armenian	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
Dutch and Flemish	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
English	–	1	1	–	–	–	–	1	1	–	–	–	–	–	–
Finnish	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
French	–	1	1	–	1	1	–	1	1	–	–	–	–	–	–
German	–	–	–	–	1	1	–	–	–	–	–	–	1	–	1
Greek	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hebrew	–	1	1	–	1	1	–	–	–	–	–	–	–	–	–
Irish	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Italian[1]	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–
Lithuanian	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
Magyar	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Scandinavian[2]	–	–	1	–	1	1	1	1	2	–	–	–	–	–	–
Scotch	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Slavonic[3]	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Spanish-American	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Syrian	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other specific races	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mixed	1	–	1	1	3	4	1	4	5	–	–	–	2	1	3
Race unascertained	–	–	–	–	–	–	2	–	2	–	–	–	–	–	–
Total	1	6	7	1	8	9	5	8	13	1	–	1	3	1	4

[1] Includes "North" and "South."
[2] Norwegians, Danes and Swedes.
[3] Includes Bohemian, Bosnian, Croatian, Dalmatian, Herzegovinian, Montenegrin, Moravian, Polish, Russian, Ruthenian, Servian, Slovak, Slovenian.

TABLE 8. *Age of First Admissions Classified with Reference to Principal Psychoses.*

PSYCHOSES.	Total.			Under 15 years.			15–19 years.			20–24 years.			25–29 years.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–
2. Senile	19	32	51	–	–	–	–	–	–	–	–	–	–	–	–
3. With cerebral arteriosclerosis	26	20	46	–	–	–	–	–	–	–	–	–	–	–	–
4. General paralysis	33	9	42	–	1	1	–	–	–	–	–	–	–	1	1
5. With cerebral syphilis	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	6	2	8	–	1	1	2	–	2	–	–	–	–	1	1
9. Alcoholic	47	3	50	–	–	–	–	–	–	–	–	–	1	–	1
10. Due to drugs and other exogenous toxins	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	12	8	20	–	–	–	–	–	–	–	1	1	1	2	3
13. Manic-depressive	15	13	28	–	–	–	1	–	1	1	2	3	2	2	4
14. Involution melancholia	1	11	12	–	–	–	–	–	–	–	–	–	–	–	–
15. Dementia præcox	53	40	93	–	–	–	2	4	6	11	4	15	12	6	18
16. Paranoia and paranoid conditions	7	12	19	–	–	–	–	–	–	–	–	–	1	1	2
17. Epileptic psychoses	–	2	2	–	–	–	–	–	–	–	2	2	–	–	–
18. Psychoneuroses and neuroses	1	6	7	–	–	–	–	2	2	–	2	2	–	–	–
19. With psychopathic personality	1	8	9	1	1	2	–	2	2	–	–	–	–	–	–
20. With mental deficiency	5	8	13	1	–	1	–	1	1	–	–	–	1	2	3
21. Undiagnosed psychoses	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	3	1	4	1	–	1	1	–	1	–	1	1	–	–	–
Total	234	178	412	3	3	6	6	9	15	13	12	25	18	15	33

TABLE 8. *Age of First Admissions Classified with Reference to Principal Psychoses* — Continued.

PSYCHOSES.	30–34 years.			35–39 years.			40–44 years.			45–49 years.			50–54 years.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2. Senile	–	–	–	–	–	–	–	–	–	–	–	–	1	2	3
3. With cerebral arteriosclerosis	–	–	–	–	–	–	–	–	–	–	1	1	–	4	4
4. General paralysis	3	1	4	6	1	7	6	–	6	6	1	7	3	–	3
5. With cerebral syphilis	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	–	–	–	1	–	1	1	–	1	–	–	–	–	–	–
9. Alcoholic	3	–	3	6	2	8	11	–	11	10	–	10	10	1	11
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	1	–	1	–	–	–	–	1	1
11. With pellagra	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	–	–	–	2	4	6	–	–	–	–	–	–	–	–	–
13. Manic-depressive	2	3	5	2	1	3	3	2	5	1	1	2	–	–	–
14. Involution melancholia	–	–	–	–	–	–	–	4	4	–	3	3	1	2	3
15. Dementia præcox	3	4	7	8	8	16	9	4	13	5	6	11	2	2	4
16. Paranoia and paranoid conditions	2	1	3	–	3	3	–	2	2	1	1	2	1	1	2
17. Epileptic psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	–	–	–	–	2	2	1	–	1	–	–	–	–	–	–
19. With psychopathic personality	–	2	2	–	–	–	–	1	1	–	1	1	–	1	1
20. With mental deficiency	–	1	1	2	2	4	1	–	1	–	1	1	–	1	1
21. Undiagnosed psychoses	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
Total.	14	12	26	28	24	52	33	13	46	23	15	38	18	15	33

TABLE 8. *Age of First Admissions Classified with Reference to Principal Psychoses* — Concluded.

PSYCHOSES.	55–59 years.			60–64 years.			65–69 years.			70 years and over.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	–	–	–	–	–	–	–	–	–	–	–	–
2. Senile	–	–	–	1	2	3	5	5	10	12	23	35
3. With cerebral arteriosclerosis	4	3	7	4	1	5	9	3	12	9	8	17
4. General paralysis	5	2	7	2	2	4	2	–	2	–	–	–
5. With cerebral syphilis	–	–	–	–	–	–	–	–	–	1	–	1
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	1	–	1	1	–	1	–	–	–	–	–	–
9. Alcoholic	2	–	2	2	–	2	2	–	2	–	–	–
10. Due to drugs and other exogenous toxins	–	1	1	–	–	–	–	–	–	–	–	–
11. With pellagra	–	–	–	1	–	1	–	–	–	–	–	–
12. With other somatic diseases	2	1	3	2	–	2	1	–	1	4	–	4
13. Manic-depressive	–	1	1	3	1	4	–	–	–	–	–	–
14. Involution melancholia	–	1	1	–	1	1	–	–	–	–	–	–
15. Dementia præcox	1	1	2	–	1	1	–	–	–	–	–	–
16. Paranoia and paranoid conditions	2	–	2	–	3	3	–	–	–	–	–	–
17. Epileptic psychoses	–	–	–	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	–	–	–	–	–	–	–	–	–	–	–	–
19. With psychopathic personality	–	–	–	–	–	–	–	–	–	–	–	–
20. With mental deficiency	–	–	–	–	–	–	–	–	–	–	–	–
21. Undiagnosed psychosis	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	–	–	–	–	–	–	–	–	–	–	–
Total	17	10	27	16	11	27	19	8	27	26	31	57

TABLE 9. *Degree of Education of First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES.	Total.			Illiterate.			Reads and Writes.[1]			Common School.			High School.			College.			Unascertained.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
2. Senile	19	32	51	1	1	2	–	2	2	11	17	28	1	4	5	–	2	2	6	6	12
3. With cerebral arteriosclerosis	26	20	46	3	4	7	2	2	4	10	10	20	2	3	5	2	–	2	7	1	8
4. General paralysis	33	9	42	2	1	3	1	–	1	23	6	29	3	1	4	2	–	2	2	1	3
5. With cerebral syphilis	1	1	2	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	1	–	1
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	6	2	8	2	1	3	–	–	–	4	–	4	–	1	1	–	–	–	–	–	–
9. Alcoholic	47	3	50	3	2	5	8	1	9	25	–	25	4	–	4	1	–	1	6	–	6
10. Due to drugs and other exogenous toxins	1	2	3	–	1	1	–	–	–	1	1	2	–	–	–	–	–	–	–	–	–
11. With pellagra	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	12	8	20	4	–	4	–	1	1	1	7	8	2	–	2	1	–	1	4	–	4
13. Manic-depressive	15	13	28	–	1	1	2	–	2	5	7	12	3	4	7	3	1	4	2	–	2
14. Involution melancholia	1	11	12	–	–	–	–	1	1	1	9	10	–	1	1	–	–	–	–	–	–
15. Dementia præcox	53	40	93	1	3	4	2	1	3	30	28	58	13	6	19	3	–	3	4	2	6
16. Paranoia and paranoid conditions	7	12	19	1	2	3	2	3	5	1	5	6	2	1	3	–	1	1	1	–	1
17. Epileptic psychoses	–	2	2	–	–	–	–	–	–	–	2	2	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	1	6	7	–	–	–	–	–	–	–	6	6	1	–	1	–	–	–	–	–	–
19. With psychopathic personality	1	8	9	1	2	2	–	–	–	–	6	6	–	1	1	–	–	–	–	–	–
20. With mental deficiency	5	8	13	1	3	4	2	–	2	1	4	5	–	–	–	–	–	–	1	1	2
21. Undiagnosed psychoses	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
22. Without psychosis	3	1	4	1	–	1	–	–	–	1	1	2	1	–	1	–	–	–	–	–	–
Total	234	178	412	20	20	40	19	11	30	117	109	226	32	23	55	12	4	16	34	11	45

[1] Includes those who did not complete fourth grade in school.

TABLE 10. *Environment of First Admissions Classified with Reference to Principal Psychoses.*

PSYCHOSES.	Total.			Urban.			Rural			Unascertained.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	1	–	1	1	–	1	–	–	–	–	–	–
2. Senile	19	32	51	18	29	47	1	3	4	–	–	–
3. With cerebral arteriosclerosis	26	20	46	26	20	46	–	–	–	–	–	–
4. General paralysis	33	9	42	31	9	40	2	–	2	–	–	–
5. With cerebral syphilis	1	1	2	1	1	2	–	–	–	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	6	2	8	6	2	8	–	–	–	–	–	–
9. Alcoholic	47	3	50	45	3	48	2	–	2	–	–	–
10. Due to drugs and other exogenous toxins	1	2	3	1	2	3	–	–	–	–	–	–
11. With pellagra	1	–	1	1	–	1	–	–	–	–	–	–
12. With other somatic diseases	12	8	20	12	8	20	–	–	–	–	–	–
13. Manic-depressive	15	13	28	15	12	27	–	1	1	–	–	–
14. Involution melancholia	1	11	12	1	9	10	–	2	2	–	–	–
15. Dementia præcox	53	40	93	50	38	88	3	2	5	–	–	–
16. Paranoia and paranoid conditions	7	12	19	7	12	19	–	–	–	–	–	–
17. Epileptic psychoses	–	2	2	–	2	2	–	–	–	–	–	–
18. Psychoneuroses and neuroses	1	6	7	1	5	6	–	1	1	–	–	–
19. With psychopathic personality	1	8	9	1	8	9	–	–	–	–	–	–
20. With mental deficiency	5	8	13	5	8	13	–	–	–	–	–	–
21. Undiagnosed psychoses	1	–	1	1	–	1	–	–	–	–	–	–
22. Without psychosis	3	1	4	3	1	4	–	–	–	–	–	–
Total	234	178	412	226	169	395	8	9	17	–	–	–

TABLE 11. *Economic Condition of First Admissions Classified with Reference to Principal Psychoses.*

PSYCHOSES.	Total.			Dependent.			Marginal.			Comfortable.			Unascertained.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–
2. Senile	19	32	51	–	2	2	14	28	42	–	–	–	5	2	7
3. With cerebral arteriosclerosis	26	20	46	1	–	1	20	20	40	–	–	–	5	–	5
4. General paralysis	33	9	42	1	–	1	30	7	37	–	–	–	2	2	4
5. With cerebral syphilis	1	1	2	–	–	–	1	–	1	–	–	–	–	1	1
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	6	2	8	–	–	–	6	2	8	–	–	–	–	–	–
9. Alcoholic	47	3	50	–	–	–	40	3	43	–	–	–	7	–	7
10. Due to drugs and other exogenous toxins	1	2	3	–	–	–	1	2	3	–	–	–	–	–	–
11. With pellagra	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–
12. With other somatic diseases	12	8	20	1	–	1	10	8	18	–	–	–	1	–	1
13. Manic-depressive	15	13	28	–	–	–	14	13	27	–	–	–	1	–	1
14. Involution melancholia	1	11	12	–	–	–	1	10	11	–	–	–	–	1	1
15. Dementia præcox	53	40	93	1	3	4	43	29	72	–	–	–	9	8	17
16. Paranoia and paranoid conditions	7	12	19	–	–	–	6	12	18	–	–	–	1	–	1
17. Epileptic psychoses	–	2	2	–	–	–	–	2	2	–	–	–	–	–	–
18. Psychoneuroses and neuroses	1	6	7	–	–	–	1	6	7	–	–	–	–	–	–
19. With psychopathic personality	1	8	9	–	–	–	1	6	7	–	–	–	–	2	2
20. With mental deficiency	5	8	13	–	–	–	5	8	13	–	–	–	–	–	–
21. Undiagnosed psychoses	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–
22. Without psychosis	3	1	4	–	–	–	3	1	4	–	–	–	–	–	–
Total	234	178	412	4	5	9	199	157	356	–	–	–	31	16	47

TABLE 12. *Use of Alcohol by First Admissions Classified with Reference to Principal Psychoses.*

PSYCHOSES.	Total.			Abstinent.			Temperate.			Intemperate			Unascertained.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–
2. Senile	19	32	51	6	21	27	5	2	7	2	1	3	6	8	14
3. With cerebral arteriosclerosis	26	20	46	7	18	25	10	–	10	2	1	3	7	1	8
4. General paralysis	33	9	42	4	8	12	14	–	14	12	1	13	3	–	3
5. With cerebral syphilis	1	1	2	–	1	1	–	–	–	1	–	1	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	6	2	8	3	2	5	3	–	3	–	–	–	–	–	–
9. Alcoholic	47	3	50	–	–	–	–	–	–	47	3	50	–	–	–
10. Due to drugs and other exogenous toxins	1	2	3	–	–	–	–	–	–	1	2	3	–	–	–
11. With pellagra	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–
12. With other somatic diseases	12	8	20	4	6	10	2	–	2	2	–	2	4	2	6
13. Manic-depressive	15	13	28	5	8	13	3	2	5	3	3	6	4	–	4
14. Involution melancholia	1	11	12	1	11	12	–	–	–	–	–	–	–	–	–
15. Dementia præcox	53	40	93	32	33	65	12	3	15	7	1	8	2	3	5
16. Parnaoia and paranoid conditions	7	12	19	2	10	12	4	2	6	1	–	1	–	–	–
17. Epileptic psychoses	–	2	2	–	2	2	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	1	6	7	1	6	7	–	–	–	–	–	–	–	–	–
19. With psychopathic personality	1	8	9	1	7	8	–	–	–	–	–	–	–	1	1
20. With mental deficiency	5	8	13	2	5	7	1	3	4	1	–	1	1	–	1
21. Undiagnosed psychoses	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–
22. Without psychosis	3	1	4	3	1	4	–	–	–	–	–	–	–	–	–
Total	234	178	412	73	139	212	54	12	66	80	12	92	27	15	42

TABLE 13. *Marital Condition of First Admissions Classified with Reference to Principal Psychoses.*

PSYCHOSES.	Total.			Single.			Married.			Widowed.			Separated.			Divorced.			Unascertained.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	1	–	1	1	–	1	–	–	–	–	–	–	–	–		–	–	–	–	–	–
2. Senile	19	32	51	1	5	6	6	8	14	10	19	29	2	–	2	–	–	–	–	–	–
3. With cerebral arteriosclerosis	26	20	46	2	7	9	14	5	19	9	7	16	1	–	1	–	1	1	–	–	–
4. General paralysis	33	9	42	9	1	10	19	7	26	3	1	4	–	–	–	1	–	1	1	–	1
5. With cerebral syphilis	1	1	2	1	–	1	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	6	2	8	2	1	3	2	1	3	1	–	1	–	–	–	1	–	1	–	–	–
9. Alcoholic	47	3	50	20	1	21	19	2	21	5	–	5	1	–	1	–	–	–	2	–	2
10. Due to drugs and other exogenous toxins	1	2	3	–	–	–	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	12	8	20	2	–	2	5	7	12	3	1	4	1	–	1	1	–	1	–	–	–
13. Manic-depressive	15	13	28	7	1	8	7	11	18	–	–	–	–	–	–	1	1	2	–	–	–
14. Involution melancholia	1	11	12	–	5	5	1	3	4	–	3	3	–	–	–	–	–	–	–	–	–
15. Dementia præcox	53	40	93	42	18	60	8	15	23	–	3	3	1	2	3	1	1	2	1	1	2
16. Paranoia and paranoid conditions	7	12	19	3	3	6	4	7	11	–	1	1	–	–	–	–	1	1	–	–	–
17. Epileptic psychoses	–	2	2	–	1	1	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	1	6	7	–	5	5	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–
19. With psychopathic personality	1	8	9	1	6	7	–	–	–	–	1	1	–	–	–	–	1	1	–	–	–
20. With mental deficiency	5	8	13	4	5	9	–	3	3	–	–	–	–	–	–	–	–	–	1	–	1
21. Undiagnosed psychoses	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	3	1	4	3	1	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	234	178	412	99	60	159	88	74	162	31	36	67	6	2	8	5	5	10	5	1	6

Table 14. *Psychoses of Readmissions.*

Psychoses.	Males.	Females.	Total.
1. Traumatic psychoses	1	–	1
2. Senile psychoses	1	–	1
3. Psychoses with cerebral arteriosclerosis	3	3	6
4. General paralysis	2	–	2
5. Psychoses with cerebral syphilis	–	–	–
6. Psychoses with Huntington's chorea	–	–	–
7. Psychoses with brain tumor	–	–	–
8. Psychoses with other brain or nervous diseases	–	–	–
9. Alcoholic psychoses	12	–	12
10. Psychoses due to drugs and other exogenous toxins	–	–	–
11. Psychoses with pellagra	–	–	–
12. Psychoses with other somatic diseases	1	2	3
13. Manic-depressive psychoses	7	6	13
14. Involution melancholia	1	2	3
15. Dementia præcox	9	12	21
16. Paranoia and paranoid conditions	1	–	1
17. Epileptic psychoses	–	–	–
18. Psychoneuroses and neuroses	–	–	–
19. Psychoses with psychopathic personality	–	–	–
20. Psychoses with mental deficiency	1	3	4
21. Undiagnosed psychoses	1	–	1
22. Without psychosis	1	2	3
Total	41	30	71

Table 15. *Discharges of Patients Classified with Reference to Principal Psychoses and Condition on Discharge.*

Psychoses.	Total.			Recovered.			Improved.			Unimproved.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	2	1	3	–	–	–	1	1	2	1	–	1
2. Senile	3	7	10	–	–	–	2	4	6	1	3	4
3. With cerebral arteriosclerosis	6	2	8	–	–	–	1	2	3	5	–	5
4. General paralysis	6	2	8	–	–	–	6	2	8	–	–	–
5. With cerebral syphilis	3	1	4	–	–	–	3	1	4	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	2	1	3	1	–	1	–	–	–	1	1	2
9. Alcoholic	40	6	46	2	–	2	18	6	24	20	–	20
10. Due to drugs and other exogenous toxins	2	–	2	–	–	–	1	–	1	1	–	1
11. With pellagra	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	–	10	10	–	–	–	–	9	9	–	1	1
13. Manic-depressive	14	17	31	–	–	–	8	13	21	6	4	10
14. Involution melancholia	4	11	15	–	–	–	3	10	13	1	1	2
15. Dementia præcox	68	40	108	–	–	–	30	31	61	38	9	47
16 Paranoia and paranoid conditions	9	6	15	–	–	–	3	4	7	6	2	8
17. Epileptic psychoses	1	3	4	–	–	–	1	–	1	–	3	3
18. Psychoneuroses and neuroses	4	3	7	–	–	–	3	2	5	1	1	2
19. With psychopathic personality	7	3	10	–	–	–	4	3	7	3	–	3
20. With mental deficiency	10	5	15	–	–	–	3	4	7	7	1	8
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	1	3	4	–	–	–	–	–	–	–	–	–
Total	182	121	303	3	–	3	87	92	179	91	26	117

TABLE 16. *Causes of Death of Patients Classified with Reference to Principal Psychoses.*

CAUSES OF DEATH.	Total.			Senile.			With cerebral arterio-sclerosis.			General paralysis.			Alcoholic.			Manic-depressive.			Involution melancholia.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Epidemic, Endemic and Infectious Diseases.																					
Dysentery	1	1	2	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
Lethargic encephalitis	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Tuberculosis of the respiratory system	12	13	25	–	1	1	–	2	2	–	–	–	2	–	2	–	3	3	–	–	–
Tuberculosis of other organs	2	1	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Syphilis (non-nervous forms)	1	1	2	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	1	–	1
Purulent infection, septicæmia	–	1	1	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
General Diseases Not Included in Class I.																					
Cancer and other malignant tumors	6	4	10	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Pellagra	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diabetes	–	2	2	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholism (acute or chronic)	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Other general diseases	3	–	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Nervous System.																					
Cerebral hemorrhage, apoplexy	1	1	2	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
General paralysis of the insane	16	2	18	–	–	–	–	–	–	16	2	18	–	–	–	–	–	–	–	–	–
Other forms of mental disease	–	4	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Epilepsy	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chorea	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other diseases of the nervous system	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Circulatory System.																					
Endocarditis and myocarditis	7	11	18	5	4	9	1	2	3	–	2	2	–	–	–	–	–	–	–	–	–
Arteriosclerosis	29	35	64	11	16	27	10	10	20	–	–	–	3	–	3	1	3	4	–	–	–
Other diseases of the arteries	1	2	3	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Respiratory System.																					
Bronchopneumonia	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lobar pneumonia	5	3	8	–	–	–	1	–	1	–	–	–	2	–	2	–	1	1	–	–	–
Diseases of the Digestive System.																					
Hernia and intestinal obstruction	2	3	5	–	–	–	1	–	1	–	1	1	–	–	–	–	–	–	–	1	1
Cirrhosis of liver	2	–	2	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Other diseases of liver	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other diseases of digestive system (cancer and tuberculosis excepted)	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Non-Venereal Diseases of Genito-Urinary System and Annexa.																					
Nephritis	14	13	27	5	4	9	2	4	6	–	–	–	1	1	2	2	–	2	–	–	–
External Causes.																					
Suicide	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
Accidental traumatism	1	3	4	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other external causes	1	2	3	–	–	–	–	–	–	–	1	1	1	–	1	–	–	–	–	–	–
Total	113	105	218	22	30	52	16	20	36	17	7	24	10	2	12	3	7	10	1	2	3

TABLE 16. *Causes of Death of Patients Classified with Reference to Principal Psychoses* — Concluded.

CAUSES OF DEATH.	Dementia præcox.			Paranoia and paranoid conditions.			Epileptic psychoses.			Psycho-neuroses and neuroses.			With psychopathic personality.			With mental deficiency.			All other psychoses.[1]		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Epidemic, Endemic and Infectious Diseases.																					
Dysentery	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lethargic encephalitis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2
Tuberculosis of the respiratory system	9	5	14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	2	3
Tuberculosis of other organs	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	1	–	1
Syphilis (non-nervous forms)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Purulent infection, septicæmia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
General Diseases Not Included in Class I.																					
Cancer and other malignant tumors	3	1	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	–	3
Pellagra	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Diabetes	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholism (acute or chronic)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other general diseases	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	–	3
Diseases of the Nervous System.																					
Cerebral hemorrhage, apoplexy	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
General paralysis of the insane	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other forms of mental disease	–	3	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Epilepsy	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Other diseases of the nervous system	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2
Diseases of the Circulatory System.																					
Endocarditis and myocarditis	1	3	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arteriosclerosis	2	4	6	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	1	3
Other diseases of the arteries	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Respiratory System.																					
Bronchopneumonia	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lobar pneumonia	1	1	2	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	1	1
Diseases of the Digestive System.																					
Hernia and intestinal obstruction	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
Cirrhosis of liver	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other diseases of liver	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
Other diseases of digestive system (cancer and tuberculosis excepted)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Non-Venereal Diseases of Genito-Urinary System and Annexa.																					
Nephritis	–	4	4	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	3	–	3
External Causes.																					
Suicide	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Accidental traumatism	–	1	1	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	1	1
Other external causes	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	21	26	47	1	–	1	3	–	3	–	–	–	–	–	–	1	3	4	18	8	26

[1] Includes group 22, "without psychosis."

TABLE 17. *Age of Patients at Time of Death Classified with Reference to Principal Psychoses.*

PSYCHOSES.	Total.			Under 15 years.			15–19 years.			20–24 years.			25–29 years.			30–34 years.			35–39 years.			40–44 years.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2. Senile	22	30	52	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
3. With cerebral arteriosclerosis	16	20	36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
4. General paralysis	17	7	24	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	1	–	1	1	1	2
5. With cerebral syphilis	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6. With Huntington's chorea	2	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	4	2	6	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	2	–	2
9. Alcoholic	10	2	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	1	–	1
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	10	5	15	–	–	–	–	–	–	–	–	–	–	1	1	–	1	1	–	1	1	–	1	1
13. Manic-depressive	3	7	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14. Involution melancholia	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
15. Dementia præcox	21	26	47	–	–	–	–	–	–	–	1	1	2	1	3	3	2	5	3	2	5	2	1	3
16. Paranoia and paranoid conditions	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17. Epileptic psychoses	3	–	3	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19. With psychopathic personality	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20. With mental deficiency	1	3	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	1	1	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
Total	113	105	218	1	–	1	–	–	–	–	3	3	2	2	4	4	4	8	4	5	9	6	4	10

TABLE 17. *Age of Patients at Time of Death Classified with Reference to Principal Psychoses* — Concluded.

PSYCHOSES.	45–49 years.			50–54 years.			55–59 years.			60–64 years.			65–69 years.			70 years and over.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2. Senile	–	–	–	–	–	–	–	–	–	2	3	5	3	4	7	17	23	40
3. With cerebral arteriosclerosis	–	–	–	–	1	1	–	2	2	4	5	9	5	2	7	7	10	17
4. General paralysis	4	2	6	3	–	3	3	–	3	3	–	3	–	3	3	1	–	1
5. With cerebral syphilis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
6. With Huntington's chorea	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	1	–	1	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–
9. Alcoholic	–	–	–	1	–	1	–	–	–	2	–	2	3	–	3	3	1	4
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
12. With other somatic diseases	1	–	1	–	–	–	2	–	2	2	–	2	1	–	1	4	1	5
13. Manic-depressive	–	–	–	–	1	1	–	1	1	–	1	1	1	3	4	2	1	3
14. Involution melancholia	–	–	–	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–
15. Dementia præcox	1	2	3	2	1	3	2	3	5	1	3	4	3	1	4	2	9	11
16. Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
17. Epileptic psychoses	–	–	–	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19. With psychopathic personality	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20. With mental deficiency	–	1	1	–	–	–	1	–	1	–	–	–	–	–	–	–	1	1
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	8	5	13	10	5	15	9	6	15	15	12	27	16	13	29	38	46	84

TABLE 18. *Total Duration of Hospital Life of Patients Dying in Hospital Classified According to Principal Psychoses.*

PSYCHOSES.	Total.			Less than 1 month.			1–3 months.			4–7 months.			8–12 months.			1–2 years.			3–4 years.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2. Senile	22	30	52	6	6	12	5	6	11	2	4	6	5	–	5	3	5	8	–	5	5
3. With cerebral arteriosclerosis	16	20	36	4	4	8	4	5	9	–	2	2	2	1	3	3	4	7	1	1	2
4. General paralysis	17	7	24	–	–	–	5	1	6	4	–	4	4	–	4	1	2	3	3	1	4
5. With cerebral syphilis	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6. With Huntington's chorea	2	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	4	2	6	1	–	1	–	–	–	–	–	–	–	–	–	1	2	3	–	–	–
9. Alcoholic	10	2	12	–	–	–	–	–	–	–	–	–	–	–	–	2	1	3	1	–	1
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	10	5	15	6	1	7	2	1	3	–	–	–	2	1	3	–	2	2	–	–	–
13. Manic-depressive	3	7	10	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	–	–	–
14. Involution melancholia	1	2	3	–	–	–	–	–	–	1	–	1	–	–	–	–	1	1	–	1	1
15. Dementia præcox	21	26	47	–	2	2	–	–	–	1	1	2	1	–	1	1	1	2	1	–	1
16. Paranoia and paranoid conditions	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17. Epileptic psychoses	3	–	3	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
18. Psychoneuroses and neuroses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19. With psychopathic personality	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20. With mental deficiency	1	3	4	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
Total	113	105	218	18	13	31	17	14	31	8	7	15	14	2	16	13	20	33	7	8	15

TABLE 18. *Total Duration of Hospital Life of Patients Dying in Hospital Classified According to Principal Psychoses* — Concluded.

PSYCHOSES.	5–6 years.			7–8 years.			9–10 years.			11–12 years.			13–14 years.			15–19 years.			20 years and over.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2. Senile	–	2	2	–	1	1	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–
3. With cerebral arteriosclerosis	–	3	3	–	–	–	–	–	–	2	–	2	–	–	–	–	–	–	–	–	–
4. General paralysis	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2
5. With cerebral syphilis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6. With Huntington's chorea	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	2	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
9. Alcoholic	1	–	1	3	–	3	–	–	–	–	–	–	–	–	–	–	1	1	3	–	3
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13. Manic-depressive	–	1	1	1	–	1	–	–	–	–	1	1	–	1	1	1	1	2	–	2	2
14. Involution melancholia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15. Dementia præcox	3	2	5	–	3	3	2	3	5	2	1	3	2	2	4	2	3	5	6	8	14
16. Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
17. Epileptic psychoses	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19. With psychopathic personality	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20. With mental deficiency	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	2	3
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	8	9	17	4	4	8	3	4	7	5	2	7	2	3	5	3	5	8	11	14	25

Table 19. *Family Care Department.*

	Male.	Female.	Total.
Remaining in Family Care Oct. 1, 1928	1	12	13
On visit from Family Care Oct. 1, 1928	–	–	–
Admitted during year	–	3	3
Whole number of cases within the year	1	15	16
Dismissed within the year	–	5	5
Returned to institution	–	5	5
Discharged	–	–	–
On visit	–	–	–
Remaining in Family Care Sept. 30, 1929	1	10	11
Supported by State	–	6	6
Private	1	3	4
Self-supporting	–	1	1
Number of different persons within the year	1	14	15
Number of different persons dismissed	–	5	5
Number of different persons admitted	–	3	3
Average daily number in Family Care during the year	1.00	11.33	12.33
Supported by State	–	6	6
Private	1	3	4
Self-supporting	–	1	1